

**MEETING OF THE
STATE BOARD FOR FINANCING WATER PROJECTS**

Summary Minutes

**Wednesday, June 14, 2017
1:00 PM
901 S. Stewart St., 2nd Floor Tahoe Hearing Room
Carson City, NV 89701**

Members Present:

Bruce Scott, Chairman
Andrew Belanger, Vice Chairman
Lori Williams
Steve Walker
Mike Workman

Staff Attending:

Katie Armstrong, DAG
Daralyn Dobson
My-Linh Nguyen
Michelle Stamates
Jason Cooper
Kyle Casci

A. INTRODUCTION AND ROLL CALL (Non Action)

The meeting was started at 1:00 PM by Chairman Scott who invited Board members and others present to introduce themselves.

B. APPROVAL OF MINUTES - February 1, 2017 MEETING (For Possible Action)

Motion: Mr. Walker moved to accept the minutes as written. Mr. Workman seconded the motion, Ms. Williams & Vice Chairman Belanger abstained and the minutes were approved.

C. DRINKING WATER STATE REVOLVING FUND PROGRAM & CAPITAL IMPROVEMENTS GRANT PROGRAM

1. Discussion and Possible Approval of the 2018 DWSRF Priority List (For Possible Action)

Ms. Stamates presented the 2018 Drinking Water Projects Priority List for Board approval. A copy of that list (with the additions outlined below) may be found in Attachment 1.

The development of the list and the classification and rankings were explained, and Ms. Stamates reported that a public workshop was held, as required by regulation, April 25, 2017. In December 2016, the Division sent a solicitation letter to all eligible water systems for proposed new water projects. Fourteen new projects submitted pre-applications to be added to the 2018 Priority List. Sixteen projects that were funded and completed or no longer wish to be on the Priority List were removed.

During the presentation, the Big Bend Water District and the Moapa Valley Water District both requested and were approved by the Board to be added to the 2018 Priority List. Mr. Scott stated the Priority List was documentation of the needs of the state and that any system requesting to be added to the Priority List should be added to the list.

Motion: Ms. Williams motioned that the Board for Financing Water Projects approve a resolution designated the "Year 2018 Project List Drinking Water State Revolving Fund" to approve the

priorities for determining which water systems will receive money. Mr. Walker seconded the motion, Vice Chairman Belanger abstained and it passed unanimously.

2. Discussion and Possible Approval of DWSRF Loan Commitments and Capital Improvement Grant Commitments (For Possible Action)

Ms. Stamates introduced the following five project proposals for funding. For Ms. Stamates' detailed report on each proposal, see the attachments to these minutes.

a. Humboldt County for McDermit - Capital Improvement Grant (For Possible Action)

Ms. Stamates testified that this grant request is to fund a Preliminary Engineer Report (PER) and Pilot Testing that will evaluate treatment methodologies to assure compliance with state and federal regulations. The PER and pilot testing will specifically address arsenic treatment. Work to be completed with this grant funding, includes the following: pull the packers on Well #3, water quality and pilot study, and a PER. The total cost of the project is estimated at \$85,000. The Division recommends that the Board approve a grant commitment from the Capital Improvements Grant Program in an amount not to exceed \$60,350 to the Humboldt County for the McDermit Water System Project Grant Commitment Resolution.

Mr. Walker expressed concern about money continuing to be spent on the well projects in Mcdermitt. Since, in previous years money had been given to McDermit for projects regarding other wells.

Motion: Mr. Belanger motioned that the Board for Financing Water Projects approve a resolution for the Humboldt County for McDermit Water System Project a grant commitment of \$60,350. Mr. Workman seconded and the motion passed unanimously.

b. Mount Rose Bowl Property Owners' Water Company DWSRF Loan - (For Possible Action)

Ms. Stamates testified that the Mount Rose Bowl Property Owners Water Company is seeking an SRF loan to funding a Preliminary Engineering Report (PER) and an Environmental Review (ER). A PER and ER are needed to evaluate anticipated projects required to upgrade the existing water system and ensure the compliance with federal, state, and local regulations. The PER and ER will address two specific issues affecting the water company at this time: The remediation of elevated lead and copper levels due to low ph. The replacement of the existing 10,000-gallon leaking redwood tank. In addition, the PER will address possible upgrades to the electrical system and an addition of automated controls.

The Washoe County Health District's most recent sanitary survey from December 10, 2014 noted two significant deficiencies: 1) the water system exceeds the maximum level of copper and must submit a water project to permanently address and correct the issue, and 2) the existing redwood tanks has developed leaks.

Chairman Scott inquired as to the possibility of the water system consolidating with either Truckee Meadows Water Authority or the City of Reno. It was stated, consolidation was being looked into as part of the PER.

Motion: Mr. Walker motioned that the Board for Financing Water Projects approve a resolution designated the "6-20 Mount Rose Bowl Property Owners' Water Company" for a loan commitment for the purpose of financing certain projects in an amount not to exceed \$73,000. Since the project

is eligible for additional subsidy as specified in Nevada's Intended Use Plan, for the Mount Rose 100% of the principal will be forgiven. Ms. Williams seconded the motion and it passed unanimously.

c. Baker GID - DWSRF Loan (For Possible Action)

Ms. Stamates testified that the Baker GID is asking for an amendment to an existing loan for a change of scope and additional funding of \$48,000 to replace all of the existing water meters with lead free meters. The GID is working with the Nevada Rural Water Association to increase water rates as the Board posed the concern with water rates in the past.

Ms. Williams inquired if the water rates would be raised close to the targeted rate of \$30.82 in order to self-support the water system going forward. Don Geary of Baker GID responded, saying it looked like a raise closer to \$35.00 would be going into effect.

Mr. Workman asked if the new meter installation included service lines or just replacement of meter box. The answer from Baker GID was that the installation included digging up and replacement of the existing meters.

Mr. Belanger questioned if the meters could be raised higher than how they currently sit. It was identified by Baker GID that the meters needed for that big of an upgrade were unaffordable at this time.

Motion: Mr. Belanger motioned that the Board for Financing Water Projects approve a resolution Designated the "06-2017 Baker General Improvement District Water System Project Loan Commitment" for an additional loan commitment for the purpose of financing certain projects in an amount not to exceed \$48,000 bringing the total loan commitment to \$689,375 and changing the scope of the project to include meter replacement throughout the system. Since the project is eligible for additional subsidy as specified in Nevada's Intended Use Plan, 100% of the principal will be forgiven. Ms. Williams seconded the motion and it passes unanimously.

d. Gerlach GID - DWSRF Loan (For Possible Action)

Ms. Stamates testified that Gerlach General Improvement District is seeking funding to replace a redwood tank with a welded steel tank. The current red wood tank is listed as significantly deficient in the most recent sanitary survey. The ground surface is completely saturated and may be adversely affecting the foundation of this tank. This tank must be either repaired or replaced to ensure the water system is adequately protected.

Mr. Walker voiced concern over cumulative amount of money awarded to Gerlach GID and inquired as to when they may no longer seek funding. Chairman Scott stated money being given is trying to put Gerlach GID in a position of self-sufficiency in the future.

Motion: Ms. Williams motioned that the Board for Financing Water Projects approve a resolution designated the "06-2017 Gerlach General Improvement District Water System Project Loan Commitment" for a loan commitment for the purpose of financing certain projects in an amount not to exceed \$374,775. Since the project is eligible for additional subsidy as specified in Nevada's Intended Use Plan, 100% of the principal will be forgiven. Mr. Walker seconded the motion and it passed unanimously.

e. Silver Springs Mutual Water Company- DWSRF Loan (For Possible Action)

Ms. Stamates testified that the proposed project is to fund the drilling of a new well 50 feet west of

the old Deodar Well location. The water system has 3 active wells and 3,000,0000 gallons of storage that serve two pressure zones. The wells have arsenic levels that exceed the primary drinking water standards. The existing Deodar Well has diminished in recent years due to increasing drawdown and problems related to air entrainment caused by upper screen dewatering.

Ms. Williams stated she was unaware there was a \$500,000 limit on a principal forgiveness loan. Ms. Dobson advised a limit was put in place to assist with subsidy guidelines and the limit can be extended on occasion for a project as needed.

Motion: Mr. Workman motioned that the Board for Financing Water Projects approve a resolution designated the “06-2017 Silver Springs Mutual Water Company Water System Project Loan Commitment” for a loan commitment for the purpose of financing certain projects in an amount not to exceed \$500,000. Since the project is eligible for additional subsidy as specified in Nevada’s Intended Use Plan, 100% of the principal will be forgiven. Vice Chairman Belanger seconded the motion and it passed unanimously.

D. BOARD COMMENTS - (Non Action)

Mr. Walker expressed concern about the cumulative dollar amounts awarded in the form of principal forgiveness loans to a small number of water systems throughout the state. He was concerned that fiscal sustainability was not being encouraged. Mr. Copper stated he reviews every system’s sustainability when an application is submitted by a water system, which includes potential rate increases; capital reserve requirements for previous Capital Improvement grants received, and even system consolidation. Board members and staff discussed the possibility of requiring the systems to raise rates and possibly create a reserve account. Mrs. Dobson stated that these requirements would need to be discussed with management, but could be setup in the Intended Use Plan. Vice Chairman Belanger questioned if the Board could vote on Nevada’s Intended Use Plan. Ms. Dobson said that was not something that required Board approval, but that anytime there are substantial changes to the policies the Board has been given the opportunity to comment.

Chairman Scott asked if a presentation could be made at a future Board meeting as a refresher on the application guidelines the Division reviews. Mr. Cooper and Ms. Dobson agreed that could be done.

E. PUBLIC COMMENTS - (Non Action)

There was no public comment.

F. ADJOURNMENT

There being no other business, the Board meeting adjourned at 3:45 PM.

ATTACHMENTS

- ATTACHMENT 1: **Year 2018 Priority List**
- ATTACHMENT 2: **Humboldt County for McDermitt**
- ATTACHMENT 3: **Mount Rose Bowl Property Owners' Water Company Loan Commitment**
- ATTACHMENT 4: **Baker General Improvement District Revised Loan Commitment**
- ATTACHMENT 5: **Gerlach GID Water System Loan Commitment**
- ATTACHMENT 6: **Silver Springs Mutual Water Company Loan Commitment**

Year 2018 Priority List

Board for Financing Water Projects Summary Drinking Water State Revolving Fund June 2017

GENERAL

The Nevada Division of Environmental Protection (Division) administers the Drinking Water State Revolving Loan Fund (DWSRF) under the Nevada Revised Statutes (NRS) 445A.200 to 445A.295, inclusive. The development of the Priority List of projects is an integral part of the DWSRF program and is required by both federal and state regulation. Only those projects on the Priority List will be considered for possible funding. NRS 445A.265 (3), requires the Board for Financing Water Projects approve the Priority List.

RANKING PROCESS

Nevada uses a ranking system to prioritize the order in which eligible projects will be financed [Nevada Administrative Code (NAC) 445A.67566 to 445A.67574, inclusive]. In general, priority is given to projects that facilitate compliance with national primary drinking water regulations applicable to the public water system under Section 1412 of the Safe Drinking Water Act. The priority ranking system is described in detail in NAC 445A.67569. Projects are ranked into the following four classes, listed in order of priority:

1. Class I: Significant (acute) health risks;
2. Class II: Violation of primary and/or secondary drinking water standards (chronic health risks);
3. Class III: Infrastructure rehabilitation/replacement; and
4. Class IV: Refinance of existing debt

As specified in NAC 445A.67569, points assigned to address different problems within a class are additive. The initial ranking number is multiplied by the ratio of the state median household income to the public water system median household income. If two or more water projects within the same class have the same final rank number, the water project that is associated with the service area with the highest population is ranked higher. Within each of the above categories, the projects are ranked by type of public water system in the following order:

1. Community public water systems;
2. Non-transient, non-community water systems (Non-profit only); and
3. Transient, non-community water systems (Non-profit only)

The NAC allows the Division to consider any other factor as provided in the Intended Use Plan established for the year in which the priority list is developed. Eligible projects on the priority list may be bypassed if the applicant withdraws a project, requests that action be deferred, fails to meet submittal deadlines, or is not ready to proceed as determined by the Division. The projects that are bypassed are provided notice by the Division and have an opportunity for objection.

2018 PRIORITY LIST DEVELOPMENT

In late December 2016, the Division sent a solicitation to all eligible water systems for proposed new water projects. The following fourteen (14) new projects submitted pre-applications to be added to the 2018 Priority List.

<u>Rank</u>	<u>Applicant</u>	<u>Project</u>
3	Humboldt Co – Grass Valley	PER/ER, Creation of a new water system
5	Humboldt Co - McDermitt	PER/ER; Arsenic compliance
7	Truckee Meadows Water Auth	Consolidation of Old Forty West water system with TMWA (arsenic MCL violation)
17	Churchill Co – Pine Grove	Rehabilitate & consolidate Pine Grove water system with County's Sand Creek water system
26	City of North Las Vegas	Replacement of 4 wells including disinfection & buildings
41	Douglas Co - Uppaway	PER/ER; System upgrades needed for a possible consolidation with Glenbrook
45	Kingsbury GID	Consolidation of Ponderosa HOA with KGID
47	Kingsbury GID	PER/ER; Rehab/replace pipelines, pumps, & tanks
51	Kingston	PER/ER; New source
60	Round Hill GID	Redundant treatment system contact chamber
70	Churchill Co	8-inch distribution line extension from Bottom Rd to Alcorn Rd
73	Esmeralda Co – Goldfield	Metering system upgrade to radio read
81	City of North Las Vegas	Advanced metering infrastructure project
86	Carson City	Loan refinancing

Sixteen (16) projects that were funded and completed or no longer wish to be on the Priority List were removed.

Public Participation

Federal and state regulations require that the priority list go through a public review process. A public workshop was held in Carson City on April 25, 2017. Prior to the workshop, the proposed, revised list and notice of the workshop were sent to all systems with projects on the list. A public notice of the workshop was published in newspapers in Reno, Las Vegas, Carson City, and Elko and was posted in state buildings and on state websites as required by NRS 241.020 (3). All substantive comments, suggestions or recommendations were addressed.

Recommendation

It is recommended that the Board for Financing Water Projects approve the Year 2018 Priority List. A resolution to that effect is attached.

The following motion is suggested:

I make a motion that the Board for Financing Water Projects approve a resolution designated the "Year 2018 Project List, Drinking Water State Revolving Fund" to approve the priorities for determining which water systems will received money from the account of the revolving fund as required in Nevada Revised Statute 445A.265 (3).

RESOLUTION

A RESOLUTION DESIGNATED THE “YEAR 2018 PROJECT PRIORITY LIST, DRINKING WATER STATE REVOLVING FUND” TO APPROVE THE PRIORITIES FOR DETERMINING WHICH WATER SYSTEMS WILL RECEIVE MONEY FROM THE ACCOUNT OF THE REVOLVING FUND AS REQUIRED IN NEVADA REVISED STATUTE 445A.265 (3).

WHEREAS, the Nevada Division of Environmental Protection is authorized pursuant to NRS 445A.200 to 445A.295, inclusive, to establish procedures for the administration of the Drinking Water State Revolving Fund; and

WHEREAS, the Drinking Water State Revolving Fund Program Guidelines promulgated by the United States Environmental Protection Agency require that the State establish a priority list of public water system projects eligible for funding from the Drinking Water State Revolving Fund and seek public review and comment on the priority list; and

WHEREAS, NRS 445A.265 (3) requires that the Division of Environmental Protection shall not establish the priorities for determining which public water systems will receive money from the account for the revolving fund without obtaining the prior approval of the Board for Financing Water Projects; and

WHEREAS, the Nevada Division of Environmental Protection may at any time after receiving approval from the Board for Financing Water Projects revise the ranking of a water project in accordance with NAC 445A.67567; and

WHEREAS, the Nevada Division of Environmental Protection provided notice and held a workshop for public comments on its proposed priority system on April 25, 2017 in Carson City; and

WHEREAS, all substantive comments, suggestions or recommendations were addressed;

NOW, THEREFORE, BE IT RESOLVED, BY THE BOARD FOR FINANCING WATER PROJECTS OF THE STATE OF NEVADA:

Section 1. This Resolution shall be known as and may be cited by the short title of the “Year 2018 Priority List Resolution.”

Section 2. Based on its review of the information and recommendation submitted to the Board concerning the Year 2018 Priority List, the Board hereby makes the following findings of fact in support of its determination to approve the revised priority list:

- (a) The Nevada Division of Environmental Protection has provided public notice of the Year 2018 Priority List;
- (b) The Nevada Division of Environmental Protection held a workshop for public review and comment of the priority list; and
- (c) The Nevada Division of Environmental Protection addressed all substantive comments from the public.

Section 3. In connection with its findings of fact set forth in Section 2 of this Resolution, the Board has determined, and does hereby declare, that it approves the Year 2018 Priority List of public water system projects eligible for funding by the Drinking Water State Revolving Fund.

Section 4. The Year 2018 Priority List included as Attachment A to this resolution and by reference incorporated herein is a true and correct copy filed with the Board for Financing Water Projects by the Nevada Division of Environmental Protection.

Section 5. This resolution shall be effective on its passage and approval.

PASSED, ADOPTED AND SIGNED JUNE 14, 2017.

Attest:

Advisor
Board for Financing Water Projects

Chairman
Board for Financing Water Projects

Attachment A

2018 Priority List

Year 2018 Priority List - Drinking Water State Revolving Fund - DRAFT

<u>2018 Rank</u>	<u>Water System</u>	<u>Total Points</u>	<u>State MHI/ PWS MHI</u>	<u>Revised Points</u>	<u>Ownership of System</u>	<u>County</u>	<u>ID#</u>	<u>Pop. Served</u>	<u>Number of Svc. Conn.</u>	<u>Project Description</u>	<u>Amount</u>
Class I--Acute Health Risks											
Community Public Water Systems											
1	Churchill County	4	1.09	4.37	Public	CH	NV0000406	750	320	Boil water, arsenic, consolidation of Casey Rd MHP with Churchill Co	\$137,600
2	Riverbelle MHP	5	0.78	3.90	Private	WA	NV0000244	150	71	PER/ER, new source - possible consolidation	\$833,500
3	Humboldt Co - Grass Valley	2	1.06	2.13	Public	HU	NV0001098	4,000	1,600	PER/ER; Creation of new water system	\$100,000
4	Las Vegas Valley Water District	2	1.03	2.07	Public	CL	NV0000090	1,306,410	354,123	Consolidation of Sunrise Mountain Trailer Park	\$302,137
										Total Class I	\$1,373,237
Class II--Chronic Health Risks											
Community Water Systems											
5	Humboldt Co (McDermitt)	10	1.43	14.34	Public	HU	NV0000162	200	100	Arsenic compliance	\$500,000
6	Truckee Meadows Water Authority	10	1.04	10.39	Public	WA	NV0000190	325,000	91,000	Groundwater treatment (arsenic, iron, manganese removal) for reliable source during drought	\$27,065,038
7	Truckee Meadows Water Authority	10	1.04	10.39	Public	WA	NV0000190	325,000	91,000	Consolidation of Old Forty West Water System with TMWA	\$500,000
8	Silver Knolls Mutual Water Co	10	0.98	9.81	Private	WA	NV0004021	120	63	Arsenic compliance	\$516,000
9	Douglas Co (Sierra Country Estates)	10	0.73	7.26	Public	DO	NV0000931	39	17	LCR compliance - consolidation & treatment	\$1,300,000
10	Mt Rose Bowl Property Owners' Water Co	10	0.64	6.43	Private	WA	NV0000732	40	15	PER/ER, LCR compliance, new storage tank	\$214,144
11	Douglas County (Fairgrounds/Sunrise Estates)	10	0.63	6.33	Public	DO	NV0002540	150	46	Arsenic compliance	\$2,619,000
12	Shoshone Estates HOA	10	0.54	5.37	Private	NY	NV0005028	240	76	Arsenic compliance & other system improvements	\$1,660,000
										Total Class II	\$34,374,182
Class III--Rehabilitation											
Community Public Water Systems											
13	Alamo Sewer & Water GID	84	0.93	77.72	Public	LI	NV0000005	900	318	PER/ER; Consolidation, source, treatment, transmission & distribution rehabilitation/replacement	\$5,500,000
14	Hawthorne Utilities	59	1.31	77.39	Public	MI	NV0000073	3,300	1,800	PER/ER; Treatment, source, storage, transmission & distribution rehabilitation/replacement	\$175,000
15	Lander Co Sewer & Water Dist 2 (Austin)	59	1.18	69.59	Public	LA	NV0000006	350	230	Source, treatment, transmission & distribution rehabilitation/replacement	\$1,007,000
16	Esmeralda Co (Goldfield)	33	2.07	68.44	Public	ES	NV0000072	375	276	Well rehabilitation, transmission line replacement, booster pump replacement, tank refurbishment	\$5,366,198
17	Churchill Co (Pine Grove Rehab)	58	1.09	63.42	Public	CH	NV0000406	750	320	Sand Creek back-up well & storage (Rehab & consolidating Pine Grove system)	\$471,975
18	Lovelock Meadows Water District	39	1.51	58.98	Public	PE	NV0000161	5,278	1,409	New well, transmission line, storage, & other system improvements	\$5,000,000
19	Topaz Ranch Estates GID	39	1.21	47.18	Public	DO	NV0000239	1,501	730	Rehabilitation/replacement: well, storage tank, transmission & distribution lines	\$13,773,956
20	Moapa Valley Water District	59	0.79	46.59	Public	CL	NV0000160	8,500	3,200	PER/ER; source, treatment, storage, transmission & distribution rehabilitation/replacement	\$1,500,000
21	Spirit Mountain Utility	21	2.12	44.54	Public	CL	NV0000221	244	120	New well, transmission & distribution lines	\$1,287,500
22	Blue Diamond Water Coop	59	0.70	41.28	Private	CL	NV0000092	85	23	PER/ER; Full system repair/rehab	\$1,194,400
23	City of Caliente	29	1.38	39.94	Public	LI	NV0000013	1,123	465	Well upgrades, transmission line & distribution line repair/replace	\$1,905,000
24	Lyon County Utilities (Dayton)	39	0.97	37.81	Public	LY	NV0000838	13,000	6,400	New well, storage, & upgrade transmission & distribution lines	\$4,000,000
25	Las Vegas Valley Water District	35	1.03	36.15	Public	CL	NV0000090	1,306,410	354,123	System rehab: source, storage, distribution & backflow	\$13,209,090
26	City of North Las Vegas	35	0.99	34.56	Public	CL	NV0000175	334,800	87,000	Replacement of 4 wells including disinfection & buildings	\$11,860,000
27	Beatty Water & Sanitation District	21	1.56	32.66	Public	NY	NV0000009	1,010	446	Pipeline replacement, storage tanks, controls, & other system projects	\$2,582,830
28	Elko Co (Mountain City)	23	1.41	32.41	Public	EL	NV0000170	134	40	Spring rehabilitation & transmission line replacement	\$993,384

<u>2018 Rank</u>	<u>Water System</u>	<u>Total Points</u>	<u>State MHI/ PWS MHI</u>	<u>Revised Points</u>	<u>Ownership of System</u>	<u>County</u>	<u>ID#</u>	<u>Pop. Served</u>	<u>Number of Svc. Conn.</u>	<u>Project Description</u>	<u>Amount</u>
Class III--Rehabilitation											
Community Public Water Systems											
29	Hawthorne Utilities	24	1.31	31.48	Public	MI	NV0000073	3,020	1,894	Replace water mains & appurtenances; repair/recoat storage tanks	\$7,458,000
30	Storey County	39	0.80	31.19	Public	ST	NV0000240	1,400	500	PER/ER (VC Highlands - New source, storage, transmission & distribution system)	\$125,000
31	Storey County (Virginia City)	24	1.19	28.61	Public	ST	NV0000240	2,517	694	Tank, transmission	\$7,000,000
32	Sage Valley MHP	25	1.09	27.25	Private	CH	NV0002023	188	50	System rehab: new well pump, pressure tank & flow meter	\$60,500
33	Lamoille Water Users, Inc	39	0.69	26.85	Private	EL	NV0000273	200	71	Storage, transmission, distribution	\$500,000
34	Douglas Co (Lake Tahoe Systems)	34	0.78	26.59	Public	DO	NV0000258 & NV0000259	2,800	1,085	Replacement/upgrade: Storage tank, booster stations, water lines, SCADA, & redundant treatment capacity	\$38,800,000
35	Orovada GID	19	1.38	26.22	Public	HU	NV0003022	200	50	Storage, distribution, meters	\$1,800,000
36	Truckee Meadows Water Authority	25	1.04	25.97	Public	WA	NV0000190	325,000	91,000	Consolidation of River Belle MHP with TMWA	\$500,000
37	Truckee Meadows Water Authority	25	1.04	25.97	Public	WA	NV0000190	325,000	91,000	Consolidation of Verdi Mutual Water System with TMWA	\$500,000
38	City of Carlin	39	0.65	25.50	Public	EL	NV0000014	2,500	900	PER/ER; Source, storage, transmission & distribution rehabilitation/replacement	\$75,000
39	City of North Las Vegas	25	0.99	24.68	Public	CL	NV0000175	335,365	86,665	Consolidation of Vans Oasis MHP w/NLV	\$320,946
40	Jackpot	18	1.35	24.37	Public	EL	NV0000088	308	88	Removal of old concrete storage tank & installation of new steel 1M-gal storage tank	\$1,416,235
41	Douglas Co (Uppaway)	31	0.78	24.25	Public	DO	NV0000817	85	35	PER/ER; Distribution system upgrades; Consolidation of Uppaway with Glenbrook; & Other system needs for consolidation	\$2,200,000
42	Silver Springs Mutual Water Co	15	1.53	23.02	Private	LY	NV0000223	2,500	1,015	Replacement well	\$730,000
43	Gold Country Water Co	25	0.85	21.16	Private	HU	NV0003079	360	122	Acquisition/consolidation of Star City HOA water system	\$675,000
44	Jackpot	15	1.35	20.31	Public	EL	NV0000088	1,195	98	PER - Well 3 replacement	\$50,000
45	Kingsbury GID - Ponderosa HOA	25	0.81	20.14	Public	DO	NV0000004	3,839	2,450	Consolidation of Ponderosa HOA with KGID	\$570,355
46	McGill - Ruth GID	18	1.09	19.70	Public	WP	NV0000164	700	320	New water source for Ruth	\$1,624,000
47	Kingsbury GID	24	0.81	19.34	Public	DO	NV0000004	3,839	2,450	PER/ER; rehab/replace pipelines, pumps, & tanks	\$90,000
48	Elko Co (Montello)	15	1.25	18.71	Public	EL	NV0000169	180	75	PER/ER; New source	\$500,000
49	Gerlach GID	10	1.87	18.66	Public	WA	NV0000071	200	140	Replace redwood storage tank	\$400,000
50	Round Hill GID	28	0.65	18.28	Public	DO	NV0000260	1,300	480	Consolidation of Castle Rock HOA with RHGID	\$568,000
51	Kingston	15	1.19	17.90	Public	LA	NV0000265	200	155	PER/ER, New source	\$2,014,000
52	Panaca Farmstead	15	1.11	16.67	Public	LI	NV0000185	963	425	Back-up well	\$500,000
53	Virgin Valley Water District	15	1.09	16.38	Public	CL	NV0000167	18,000	8,071	New source(s)	\$4,050,000
54	City of Yerington	14	1.16	16.21	Public	LY	NV0000255	3,200	1,573	Systemwide distribution line & appurtenances replacement; transmission & distribution line looping	\$16,731,550
55	Walker Lake GID	11	1.45	15.90	Public	MI	NV0000268	400	160	Distribution rehabilitation	\$2,000,000
56	Lyon County Utilities (Silver City)	14	1.12	15.64	Public	LY	NV0000240	244	116	Transmission & distribution line replacement	\$2,000,000
57	Truckee Meadows Water Authority	15	1.04	15.58	Public	WA	NV0000190	325,000	91,000	TMWA production well additions	\$4,000,000
58	Nye County (Gabbs)	6	2.44	14.64	Public	NY	NV0000063	411	160	Distribution line & appurtenances replacement	\$700,000
59	Tonopah Public Utilities	10	1.33	13.30	Public	NY	NV0000237	2,600	1,500	Airport storage tank replacement & booster pump re-conditioning	\$395,500
60	Round Hill GID	20	0.65	13.05	Public	DO	NV0000260	1,821	480	Redundant treatment system contact chamber	\$400,000
61	McGill - Ruth GID	10	1.09	10.94	Public	WP	NV0000164	700	320	New storage tank for Ruth	\$975,000
62	Kyle Canyon	15	0.68	10.26	Public	CL	NV0000142	1,040	353	New source	\$930,000
63	Stagecoach GID	8	1.14	9.16	Public	LY	NV0000224	1,411	580	Intertie Stagecoach GID with Lyon County Utilities	\$1,280,000
64	Virgin Valley Water District	8	1.09	8.74	Public	CL	NV0000167	18,000	8,071	Transmission main - Mesquite Heights to Pulte	\$1,080,000
65	Roark Estates HOA	10	0.76	7.61	Private	CL	NV0000319	62	27	New storage tank	\$92,500
66	Esmeralda Co (Silver Peak)	6	1.25	7.50	Public	ES	NV0000363	111	75	Distribution main replacement & looping, PRV improvements	\$719,303
67	City of West Wendover	6	1.20	7.22	Public	EL	NV0000246	4,990	1,103	Sycamore Way waterline improvement project	\$675,400
68	Elko Co (Tuscarora)	6	1.20	7.20	Public	EL	NV0000189	40	21	Distribution system looping	\$229,704
69	Sun Valley GID	6	1.18	7.07	Public	WA	NV0000211	19,461	5,963	Distribution to eliminate dead ends, PRV	\$230,900

<u>2018 Rank</u>	<u>Water System</u>	<u>Total Points</u>	<u>State MHI/ PWS MHI</u>	<u>Revised Points</u>	<u>Ownership of System</u>	<u>County</u>	<u>ID#</u>	<u>Pop. Served</u>	<u>Number of Svc. Conn.</u>	<u>Project Description</u>	<u>Amount</u>
Class III--Rehabilitation											
Community Public Water Systems											
70	Churchill County	6	1.09	6.56	Public	CH	NV0000406	750	320	8-inch distribution line extension from Bottom Rd to Alcorn Rd	\$333,325
71	Old River Water Company	6	1.09	6.54	Private	CH	NV0000303	300	112	Distribution lines	\$1,451,835
72	Baker GID	3	2.10	6.31	Public	WP	NV0000863	100	81	Metering system upgrade	\$136,288
73	Esmeralda Co (Goldfield Town Water)	3	2.07	6.22	Public	ES	NV0000072	375	282	Metering system upgrade to radio read	\$198,802
74	City of Ely	6	1.01	6.06	Public	WP	NV0000038	5,500	2,200	Distribution main replacements & storage upgrades	\$23,568,000
75	City of Ely	6	1.01	6.06	Public	WP	NV0000038	5,500	2,200	Water main replacements on Aultman St & Great Basin Blvd	\$3,666,000
76	Douglas Co (West Valley Water System)	15	0.39	5.90	Public	DO	NV0002564 & NV0002054	1,090	421	New water supply source	\$3,000,000
77	Humboldt Co (McDermitt)	3	1.43	4.30	Public	HU	NV0000162	200	100	Meters	\$80,000
78	Tonopah Public Utilities	3	1.33	3.99	Public	NY	NV0000237	2,600	1,500	Metering system upgrade to radio read	\$576,000
79	City of West Wendover	3	1.20	3.61	Public	EL	NV0000246	4,990	1,103	Water meter & meter yolk replacement	\$1,762,000
80	Panaca Farmstead	3	1.11	3.33	Public	LI	NV0000185	963	425	Metering system upgrade to radio read	\$400,000
81	City of North Las Vegas	3	0.99	2.96	Public	CL	NV0000175	334,800	87,000	Advanced Metering Infrastructure project	\$27,550,000
82	Lyon County Utilities (Dayton)	3	0.97	2.91	Public	LY	NV0000032	13,000	6,400	Systemwide meter replacement project	\$1,150,000
83	Douglas County Public Works	3	0.89	2.66	Public	DO	Multiple	9,450	3,610	Telemetry & SCADA improvements	\$1,265,000
Class III--Rehabilitation											
Non-Community Public Water Systems											
84	Trout Canyon Land & Water Users Assoc	59	1.21	71.47	Private	CL	NV0004060	140	70	PER/ER; Repair/rehab spring or replace with well; replace transmission & distribution lines; chlorination; additional storage	\$2,996,000
85	Humboldt River Ranch Assoc	15	0.94	14.09	Private	PE	NV0001125	150	10	PER, back-up well & other system requirements	\$150,000
										Total Class III	\$243,076,476
										Total Class IV	\$57,200,000
										TOTAL FOR ALL PROJECTS	\$336,023,895

Humboldt County for McDermitt

**Board for Financing Water Projects
State Capital Improvements Grant Program
June 2017**

Project:	Treatment Preliminary Engineering Report (PER) & Pilot Testing
Project Estimate:	\$ 85,000
Grant Amount:	\$ 60,350
Local Match:	\$ 24,650

GENERAL

Nevada Revised Statute (NRS) 349.980 to 349.987, inclusive, describes the Capital Improvements Grant Program and the powers and duties of the Board for Financing Water Projects (Board). The Nevada Division of Environmental Protection (NDEP), Office of Financial Assistance (OFA) administers the Capital Improvements Grant Program on behalf of the Board per NRS 349.982 and Nevada Administrative Code (NAC) 349.430 to 349.574, inclusive. If the Board determines to provide a grant from the Capital Improvements Grant Program, one of the requirements of the NAC is that the Board will adopt a resolution that includes a statement of approval of the Board that sets forth its findings of fact (NAC 349.535, subsection 1).

BACKGROUND

The community of McDermitt is located on U.S. Route 95 approximately 75 miles north of Winnemucca at the Nevada – Oregon border. The McDermitt water system consists of three wells, a 250,000-gallon storage tank, and the distribution system. Well #2 is used only as an emergency back-up well. Well #2 has a chlorinator, but Wells #1 & #3 do not. Arsenic concentrations in all wells exceed the maximum contaminant level (MCL) of 0.010 mg/L.

In May 2009, the Board committed \$492,000 in a Drinking Water State Revolving Fund (DWSRF) principal forgiveness loan to the McDermitt General Improvement District (GID) to conduct hydrogeologic investigations to determine the most cost effective method to mitigate the arsenic issue. The investigations included: well modifications, blending, and alternate sources of supply. Centralized treatment was not considered cost effective for the community at that time, and there was evidence of water in compliance with the arsenic standard in local wells. An additional \$32,402.37 in principal forgiveness funding was added late in the project for the purchase of a back-up generator.

Hydrogeologic Findings/Results:

- The existing municipal Wells #1 and #2 were rehabilitated as a part of this project. Due to higher arsenic concentrations (>17 mg/L), Well #2 was put on standby for emergency purposes only. Modifications to Well #1's pump intake and pumping cycle were made in an effort to mitigate the high arsenic level and identify those intervals contributing to the higher arsenic concentrations. Water quality samples under different pumping scenarios were inconsistent with respect to arsenic. It appears that arsenic concentrations contributed from the lowest, screened section of the well (below 365 feet) may be the primary reason this well cannot meet the arsenic MCL even on the basis of a running annual average. The well testing was unsuccessful in completely isolating this lower screened section of the well.

- Sampling and source water characterization of wells within the community and within an approximate 5-mile radius of the town show many areas with water that is under the arsenic MCL. Two exploratory wells were drilled during the course of the project – one at the storage tank and one approximately 2 miles south of McDermitt along Highway 95. The first exploratory well near the water storage tank yielded low quantities of water and varying arsenic levels at or just below the MCL. The aquifer in the area of the test well south of McDermitt appears to have generally low production potential in the zones of favorable water quality (arsenic levels below the MCL), and a production well in this area was not recommended.
- Although the Fort McDermitt water system is in compliance with the arsenic standard, there is a separation of approximately 4 miles between the town and the reservation. The requirement for a cooperative agreement between the state and federally regulated water systems and cost for the connection would make a consolidation difficult to implement. The Fort McDermitt Paiute-Shoshone Tribe did not express any interest in a consolidation effort.

Based on the results of the hydrogeologic investigation, the GID proposed to drill and construct a new 8-inch municipal well within approximately 30 feet of their existing Well #1. In February 2014, the Board approved \$500,000 in a DWSRF principal forgiveness loan to the GID for a new well.

- The project included three components: (1) well drilling and construction; (2) development, aquifer testing, and water quality sampling and evaluation; and (3) connection to the existing system. The new well targeted the productive zones with water quality expected to be below the arsenic MCL – generally the intervals from 115 to 180 feet below ground surface (bgs) and 315 to 365 feet bgs.
- The new well – Well #3 – came on-line in December 2015. The new well shares the existing Well #1 well house for the system tie-in and required appurtenances.
- After a year with Well #3 running, the quarterly monitoring conducted for arsenic per the Arsenic Rule (NAC 445A.454) indicated that the MCL for arsenic had been exceeded. The annual average for arsenic during the 2016 compliance year was 0.012 mg/L. A corrective action plan was requested by the Bureau of Safe Drinking Water.

PROPOSED PROJECT

A PER and pilot testing are needed to evaluate treatment methodologies to assure compliance with state and federal regulations. The PER and pilot testing will specifically address arsenic treatment.

Work to be completed with this grant funding, includes the following:

- Pull the packers on Well #3. The isolation of zones with packers, although initially successful in reducing arsenic concentration, may have resulted in increased arsenic concentrations after the initial 6 months of pumping. The increase could be attributed to greater stress on the limited production interval, resulting in greater contributions from the adjacent units with higher arsenic concentrations. Removal of the packers will result in less drawdown and could likely decrease arsenic concentrations; however, anticipation of arsenic concentrations below

the MCL would probably be overly optimistic. Removal of the packer may result in slight water quality changes that could impact the design of an arsenic treatment system.

- Water Quality & Pilot Study. Water quality data will need to be collected from Well #3 after the packers are removed. There is no current water quality data that can be provided to vendors in order to determine the viability of treatment options. A list of viable treatment options will be developed prior to obtaining quotes for pilot testing.
- PER. A Preliminary Engineering Report and Application for a Water Project will be prepared and submitted to NDEP in accordance with NAC 445A.

The NDEP, Bureau of Safe Drinking Water suggested that initial investigations focus on adsorptive media solutions (e.g., iron adsorption – granulated ferric hydroxide or oxide, titanium oxide/dioxide, iron citric acid pre-loaded granular activated carbon, ion-exchange) The capital cost of the treatment system should be kept low by sizing the equipment appropriately. McDermitt is a small water system, and it is anticipated that only a partial flow of the water will need to be treated due to the relatively low arsenic levels recorded to-date, 12 to 15 mg/L. Interfering contaminants (e.g., chloride, fluoride, dissolved organic carbon, silica, sulfate, phosphate and vanadium) should be monitored closely both before and after treatment to determine their role in media exhaustion. Long-term operating and maintenance cost for a small community is a critical consideration.

Cost Estimate

The grant percent is based on the Board's Policy on the Scale to Determine the Grant Amount. The Grant Scale considers: project need based on the priority list category, median household income, monthly residential water rates, property tax rate, number of persons served, and factors such as reduction in water loss, asset management, project management, alternative funding obtained, and performance on previously grant funded projects.

Budget Item	State Grant Funding	Local Funding	Totals by Use
Planning	\$ 60,350	\$ 24,650	\$ 85,000
Engineering Design, Inspection, & Construction Management	\$	\$	\$
Construction/Improvements	\$	\$	\$
Contingency	\$	\$	\$
Totals by Source	\$ 60,350	\$ 24,650	\$ 85,000

Project Budget:

Pull well packer on Well #3:	\$10,000
Water Quality & Pilot Study:	\$60,000*
PER:	\$15,000
Total:	\$85,000

*It is possible that the pilot studies will cost less than \$60,000. This can only be determined after water quality data are obtained and manufacturers of treatment equipment are consulted.

Project Schedule

	<u>Estimated Completion</u>
Planning - PER & Pilot Testing	September 2017

Financial Evaluation

Based upon the financial information provided, McDermitt is capable of meeting its short-term and long-term financial needs. The GID maintains its accounting records in accordance with generally accepted accounting principles for local governments and conducts its financial activities in a manner that demonstrates sustainability in their program.

The Board for Financing Water Projects believes it is important to further ensure sustainability of smaller water facilities by requiring a minimum water rate. If the communities MHI is below the State's MHI, then a reasonable water rate would be equal to 1.5% of the communities MHI for 15,000 gallons used per user, per month. In reviewing their current rate structure, McDermitt currently meets this requirement. The current rate for this level and frequency of usage is \$49.00. A rate equal to 1.5% of their MHI is \$45.07. The current water rate is also funding their operations, maintenance, debt service, and capital reserve requirements. The system is also fully metered.

Unrestricted cash has fluctuated due to the offset to payables over the last four years to equal \$79,959 by the end of FY 2016. Match for the grant will be provided from general cash.

McDermitt has not obtained any Capital Improvement Grants requiring a reserve fund according to the Nevada Board for Financing Water Projects Policies and Procedures. This grant will fund a PER and ER so no requirements will be established for a reserve fund at this time since no assets are being funded.

RECOMMENDATION

The Division recommends that the Board for Financing Water Projects approve a grant commitment from the Capital Improvements Grant Program in an amount not to exceed \$60,350 to Humboldt County for the McDermitt Water System in accordance with the resolution designated the "06-2017 the Humboldt County for the McDermitt Water System Project Grant Commitment Resolution" and the conditions attached to the resolution.

The following motion is suggested:

I make a motion that the Board for Financing Water Projects approve a resolution designated the "6-2017 Humboldt County for the McDermitt Water System Project Loan Commitment" for a grant commitment for the purpose of financing certain projects in an amount not to exceed \$60,350.

RESOLUTION

A RESOLUTION DESIGNATED THE "6-2017 HUMBOLDT COUNTY FOR THE MCDERMITT WATER SYSTEM PROJECT" TO APPROVE A GRANT COMMITMENT FOR THE PURPOSE OF FINANCING CERTAIN PROJECTS.

WHEREAS, the Board for Financing Water Projects (the “Board”) of the State of Nevada (the “State”) is authorized by Chapter 349.980 to 349.987, Nevada Revised Statutes (the “Act”), to administer a program to provide grants of money to purveyors of water to pay for costs of capital improvements to publicly owned community water systems, publicly owned non-transient water systems, and nonprofit associations or cooperative corporations that provide water service only to its members required and made necessary by the Nevada Division of Environmental Protection (NDEP), Bureau of Safe Drinking Water pursuant to NRS 445.800 to 445.955, inclusive, or made necessary by the Safe Drinking Water Act (42 U.S.C. §§ 300f *et seq.*) and the regulations adopted pursuant thereto; and

WHEREAS, Humboldt County, (the “Applicant”) has applied to the Board for a grant for a project having eligible costs estimated to be \$85,000 to pay for costs of capital improvements to a publicly owned community water system within the jurisdiction of the Applicant, which capital improvements are commonly referred to as the “Humboldt Co for McDermitt Project” (the “Project”); and

WHEREAS, in connection with seeking a grant, the Applicant has submitted a written application (the “Application”) to the Board (a true and correct copy of the Application is on file with the State); and

WHEREAS, the Board has taken all necessary and proper actions with respect to the Application as required pursuant to the Act and Chapter 349.430 to 349.549, Nevada Administrative

Code (the “Regulations”), and in connection therewith, the Board has determined to provide a grant to the Applicant; and

WHEREAS, NAC 349.535 provides in relevant part, as follows:

If the Board determines to provide a grant, it will adopt a resolution that will include:

(a) a statement of the approval of the board that sets forth its findings of fact concerning its determinations made pursuant to NAC 349.530; (b) the application; and (c) the terms for providing the grant to the applicant. . . .

NOW, THEREFORE, BE IT RESOLVED, BY THE BOARD FOR FINANCING WATER PROJECTS OF THE STATE OF NEVADA:

Section 1. This Resolution shall be known as and may be cited by the short title of the “Humboldt Co for McDermitt Project Grant Award Resolution.”

Section 2. In connection with its findings of fact set forth in Section 3 of this Resolution and subject to the provisions of Section 4 of this Resolution, the Board has determined, and does hereby declare, that it approves and shall provide a grant to the Applicant in an amount not to exceed \$60,350 or approximately 71 percent of eligible project costs estimated to be \$85,000.

Section 3. Based on its review of the Application, and based on the records and documents submitted to the Board concerning the Project, the Board hereby makes the following findings of fact in support of its determination to award a grant to the Applicant:

- (a) The proposed capital improvement is economically justified and financially feasible;
- (b) The proposed capital improvement complies with the provisions of the NRS 349.980 to 349.987, inclusive;
- (c) The plan for development of the proposed capital improvement is satisfactory;
- (d) The Applicant is able to obtain the financing required to complete the capital improvement;

- (e) The Applicant has taken sufficient and reasonable efforts to determine whether the proposed capital improvement conflicts with any regional master plan of any local, state or federal governing authority, and those efforts have not revealed such a conflict; and
- (f) The proposed capital improvement will not use or waste excessive quantities of water.

Section 4. The conditions for providing the grant to the Applicant are set forth on Attachment A attached hereto and by this reference incorporated herein.

Section 5. The Application, on file with the State and by this reference incorporated herein, is a true and correct copy of the application filed by the Applicant with the Board.

Section 6. The Board hereby authorizes and directs the Director of the Department of Conservation and Natural Resources to take all necessary and appropriate actions to effectuate the provisions of this Resolution in accordance with the Act and NAC 349.549.

Section 7. This resolution shall be effective on its passage and approval.

PASSED, ADOPTED AND SIGNED, JUNE 14, 2017:

Chairman
Board for Financing Water Projects

Attest:

Advisor
Board for Financing Water Projects

ATTACHMENT A

The Board for Financing Water Projects hereby approves a grant award subject to the following provisions and conditions:

1. The award of grant funds is contingent upon the availability of grant funds, which may be dependent upon the issuance of additional bonds. While the Board will use best efforts in selling any necessary bonds for the funding of this grant, approval of this grant does not imply or guarantee that any monies have been set aside for this project.
2. The State may enter into a funding agreement with Humboldt County (“Grantee”) for the grant funds subject to the following conditions:
 - a. Bond funds sufficient to fund the project are projected to be available. The Grantee’s costs of obtaining interim financing and the interest thereon, obtained after the execution of the Funding Agreement, will be eligible for grant reimbursement.
 - b. An administrative fee of \$1,000 has been paid to the State by the Grantee.
 - c. The Grantee must assure that water rates will continue to meet or exceed the Board’s policy on reasonable water rates as adopted on September 14, 2010.
 - d. The Grantee must adhere to the depreciation provisions of the “Policy on Depreciation – Capital Replacement Funds” as adopted by the Board for Financing Water Projects and dated May 3, 2006.

Funds deposited to this account may be used only for capital replacement projects. Appropriate projects include replacement of functionally obsolete and worn out facilities. Examples of appropriate projects include: replacement of whole sections of pipeline, valves and fire hydrants; meter replacement; and replacement of wells, storage tanks, or pressure regulating facilities. Facilities to be replaced under this fund need not meet the eligibility requirements of the Capital Improvements Grant Program. This account must be identifiable on financial reports presented to the STATE.

- e. The Grantee is subject to the provisions of NAC 349.554 through 349.574 regarding the administration of this grant.

Mount Rose Bowl Property Owners' Water Company

**Board for Financing Water Projects
Loan Commitment from the Drinking Water State Revolving Fund
June 2017**

Project: Preliminary Engineering Report (PER) & Environmental Review (ER)
Project Estimate: \$ 73,000
DWSRF Loan Amount: \$ 73,000

GENERAL

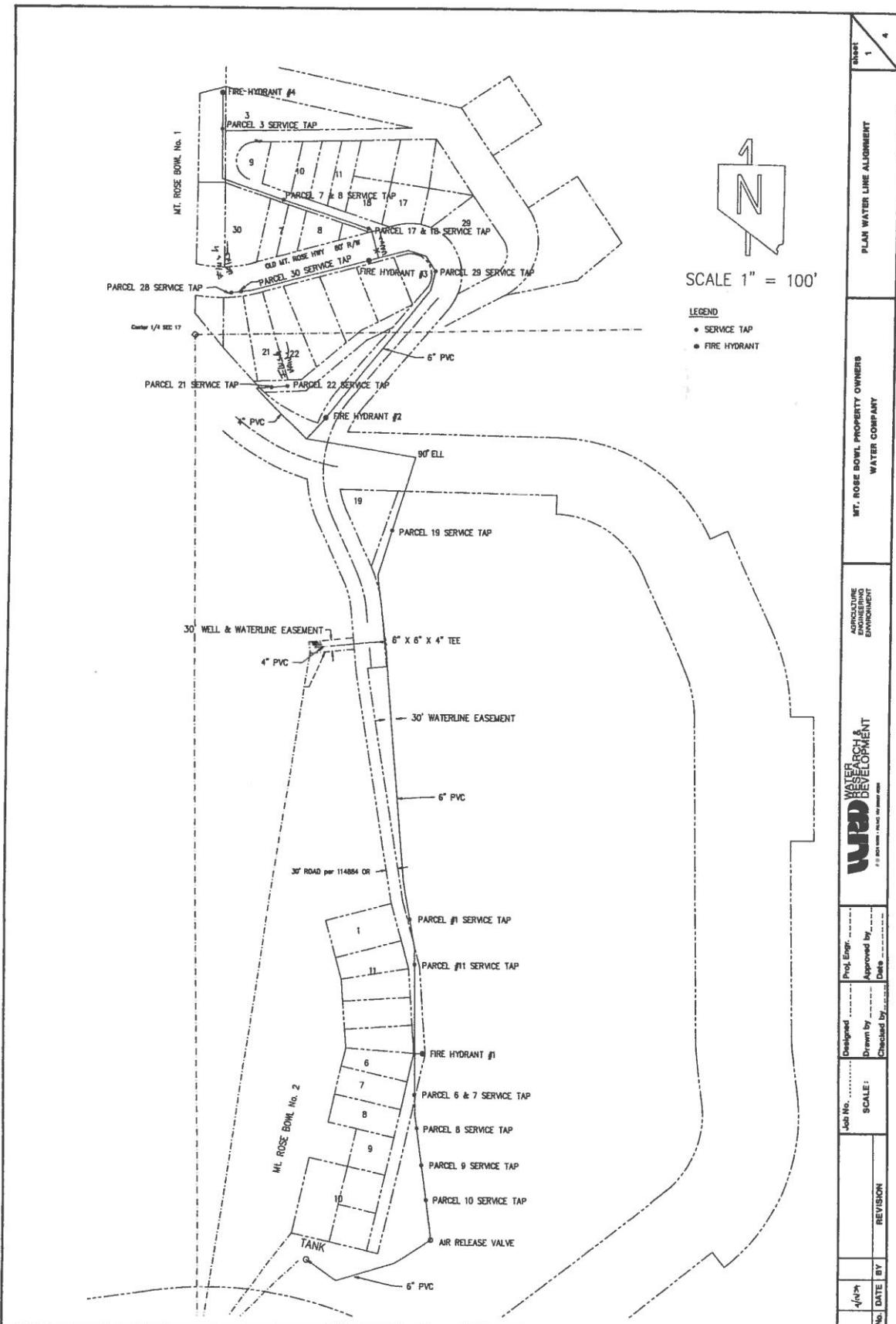
The 1996 Amendments to the Safe Drinking Water Act (SDWA) authorized the Drinking Water State Revolving Fund (DWSRF). The DWSRF is a national program to assist public water systems in financing the cost of drinking water infrastructure projects needed to achieve or maintain compliance with the SDWA requirements and to further the public health objectives of the SDWA. The SDWA authorizes the US Environmental Protection Agency (EPA) to award capitalization grants to states that have established DWSRF programs. The Nevada Legislature passed legislation that authorizes the Nevada Division of Environmental Protection (Division) to administer the DWSRF under the Nevada Revised Statutes (NRS) 445A.200 to 445A.295 inclusive. In addition to the authorizing statute, Nevada has adopted Nevada Administrative Code (NAC) 445A.6751 to 445A.67644, which describes the program requirements. Federal regulations for implementation of the DWSRF are found in 40 CFR Part 35. In addition to state and federal regulations, the conditions of the grant award, the Operating Agreement with the EPA, and an assortment of policy directives and guidance from the EPA govern the DWSRF program.

One of the requirements of the NRS pertaining to the DWSRF is that the Division shall not "commit any money in the account for the revolving fund for expenditure...without obtaining the prior approval of the board for financing water projects" (NRS 445A.265, subsection 3).

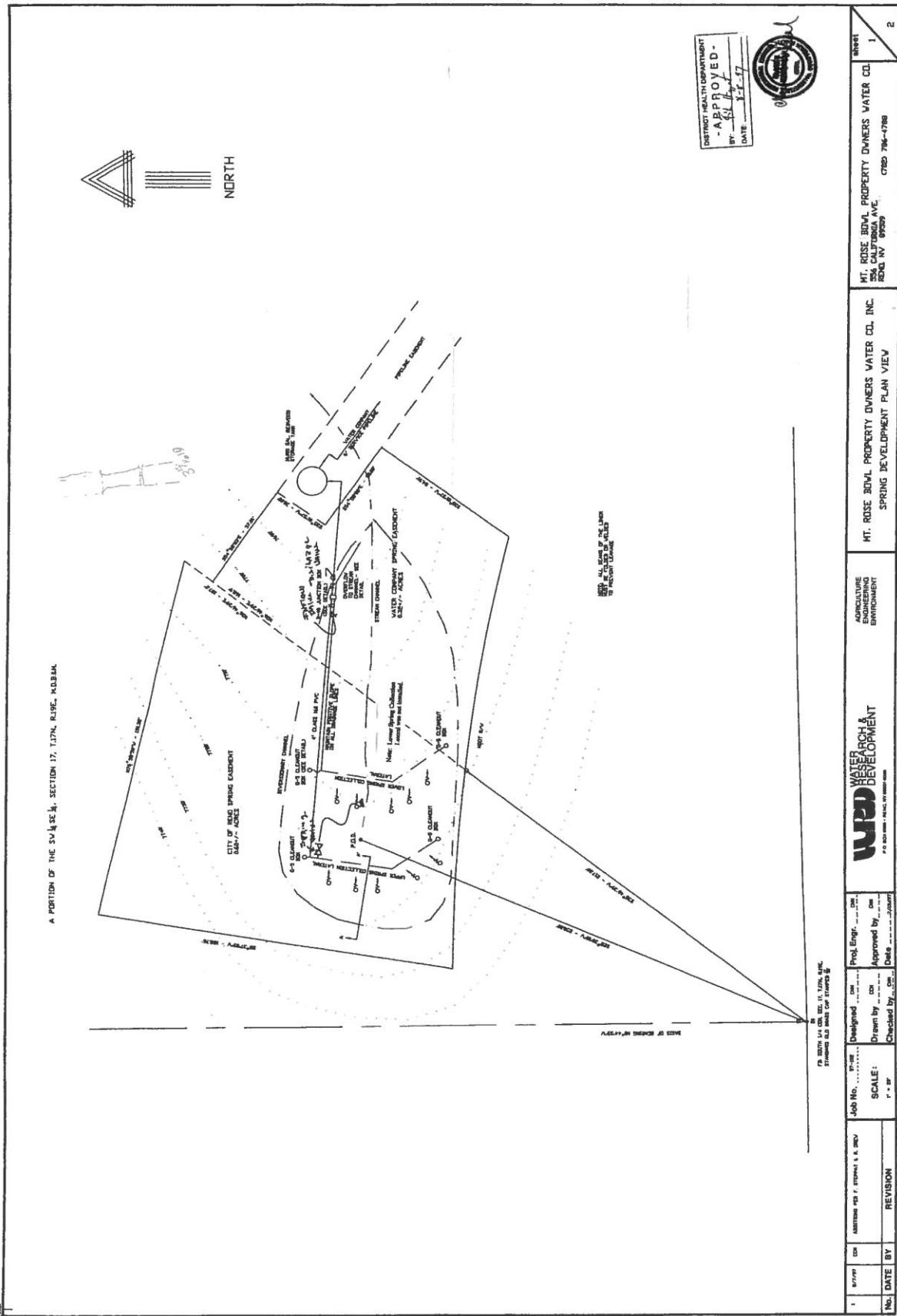
BACKGROUND

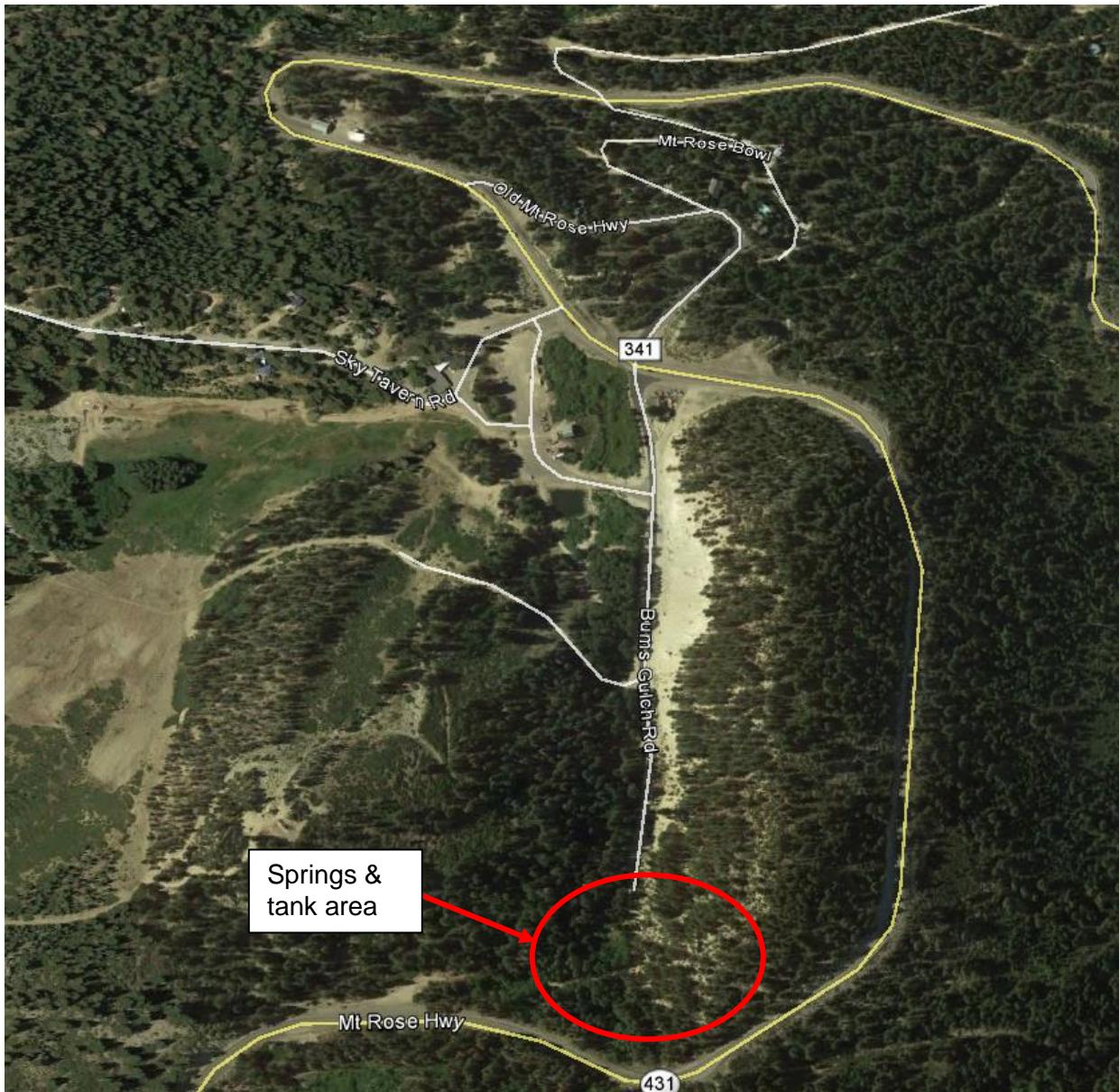
The Mount Rose Bowl Property Owners' Water Company is located approximately 24 miles south of Reno off the Mt Rose highway (SR-431). The water system currently serves approximately 50 people via 13 residential and 2 commercial connections. The primary source of supply is a set of springs with a total flow of approximately 20 GPM. The system also has a 400-ft well with a rating of 20 GPM for backup in emergencies. Total storage for the system is 10,000 gallons. Water is chlorinated at the springs only. The existing water system infrastructure is in generally very good to excellent condition.

The Washoe County Health District's most recent sanitary survey from December 10, 2014 noted two significant deficiencies: 1) the water system exceeds the maximum level of copper and must submit a water project to permanently address and correct the issue, and 2) the existing redwood tank has developed leaks.



A PORTION OF THE SUB-SECT., SECTION 17, T. 17th, R. 9th. M.D.B.M.





Preliminary Engineering Report

In 2013, a best practice PER document was developed cooperatively by the USDA, EPA, HUD, and IHS (RUS Bulletin 1780-2, April 2013). According to this document, a PER is a planning document required by many state and federal agencies as part of the process of obtaining financial assistance for development of drinking water, wastewater, solid waste, and storm water projects. The PER describes the proposed project from an engineering perspective, analyzes alternatives to the proposal, defines project costs, and provides information critical to the underwriting process.

DWSRF planning and design loans cover the cost for planning and design of a DWSRF-eligible construction project and are commonly short-term (e.g., one to three years). Water systems that borrow from the DWSRF for planning and design loans are encouraged, but not required, to obtain a construction loan from the DWSRF.

PROPOSED PROJECT

A PER and ER are needed to evaluate anticipated projects required to upgrade the existing water system and ensure compliance with federal, state, and local regulations. The PER/ER will address two specific issues affecting the water company at this time:

- The remediation of elevated lead and copper levels due to low pH. The spring water contains a high concentration of CO₂ which when converted to carbonic acid drops the pH to 6.5 causing corrosion of the copper pipes and lead solder in the residences. The water mains are PVC. The PER will review alternatives to the pH issue to bring the system into compliance with the Lead and Copper Rule. Possible alternatives should also include physical and managerial consolidation.
- The replacement of the existing 10,000-gallon, leaking, redwood tank.

In addition, the PER will address possible upgrades to the electrical system and addition of automated controls.

All federal, state, and local environmental concerns will be addressed in the ER including but not limited to BLM, USFS, NDF, US F&W, NDOW, and SHPO. The PER and ER will allow the MRBPOWC to evaluate alternatives and costs of capital improvements necessary to maintain system capacity, reliability, and sustainability.

Cost Estimate

<u>Budget Item</u>	<u>DWSRF Funding</u>	<u>Local Funding</u>	<u>Totals by Use</u>
Planning	\$ 73,000	\$	\$ 73,000
Engineering Design, Inspection, & Construction Management	\$	\$	\$
Construction/Improvements	\$	\$	\$
Contingency	\$	\$	\$
Totals by Source	\$ 73,000	\$	\$ 73,000

Project Schedule

	<u>Estimated Completion</u>
Planning – PER & ER	October 2017

Financial Evaluation

Based upon the financial information provided, MRBPOWC is funding its current operating needs. The company is a very small entity, which continues to expand its financial capacity each day. The Program will continue to work with MRBPOWC through the course of this loan. Unrestricted cash on April 2017 was \$8,637.39. MRBPOWC currently has no debt obligations.

In order to receive a DWSRF grant award from the EPA, the State of Nevada must agree to use 20% of its grant to provide additional subsidy to eligible recipients in the form of forgiveness of principal or negative interest loans or a combination of these. Nevada specified in the Intended Use Plan (IUP) that additional subsidy will be offered to communities for the preparation of planning documents

required for DWSRF-eligible construction projects. The IUP specifies that planning documents that include a PER and ER could be eligible for up to \$100,000.

The water system is metered and currently charges each connection a flat water rate of \$150/month.

Technical, Managerial and Financial Capacity

The water quality is not in compliance with requirements of the Safe Drinking Water Act. This issue will be reviewed as a part of the PER. The MRBPOWC currently employs a certified, contract operator who has the technical knowledge to operate the system. Technical assistance from both the Nevada Rural Water Association and the DWSRF is being provided to the MRBPOWS to help build technical, managerial, and financial capacity.

RECOMMENDATION

The Division recommends that the Board for Financing Water Projects approve a loan commitment from the DWSRF in the amount of \$73,000 to the Mount Rose Bowl Property Owners' Water Company. Since the project is eligible for additional subsidy as specified in Nevada's IUP, 100% of the principal will be forgiven. The Division and the Mount Rose Bowl Property Owners' Water Company will negotiate the terms and conditions of a loan agreement.

The following motion is suggested:

I make a motion that the Board for Financing Water Projects approve a resolution designated the "6-2017 Mount Rose Bowl Property Owners' Water Company Project Loan Commitment" for a loan commitment for the purpose of financing certain projects in an amount not to exceed \$73,000. Since the project is eligible for additional subsidy as specified in Nevada's Intended Use Plan, 100% of the principal will be forgiven.

RESOLUTION

A RESOLUTION DESIGNATED THE "6-2017 MOUNT ROSE BOWL PROPERTY OWNERS' WATER COMPANY PROJECT LOAN COMMITMENT" TO APPROVE A LOAN COMMITMENT FOR THE PURPOSE OF FINANCING CERTAIN PROJECTS.

WHEREAS, the Board for Financing Water Projects (the “Board”) of the State of Nevada (the “State”) is authorized by Nevada Revised Statutes (“NRS”) Chapter 445A.265 to approve for the Division of Environmental Protection (“Division”) prioritized lists of water projects and to approve the commitment of funds from the account for the revolving fund for loans to community water systems and non-transient water systems for costs of capital improvements required and made necessary pursuant to NRS 445A.800 to 445A.955, inclusive, by the Safe Drinking Water Act (42 U.S.C. §§ 300f *et seq.*) and by the regulations adopted pursuant thereto; and

WHEREAS, the Division has the responsibility of administering the Drinking Water State Revolving Fund program; and

WHEREAS, on June 14, 2017, the Board, pursuant to NRS 445A.265, approved the Year 2018 Priority List of water projects eligible for loans from the account for the revolving fund under the Drinking Water State Revolving Fund; and

WHEREAS, the Mount Rose Bowl Property Owners’ Water Company owns and operates a private community water system located in Washoe County, Nevada; and

WHEREAS, the Division ranked the Project as #10 on the Year 2018 Priority List of water projects, which was approved by the Board on June 14, 2017; and

WHEREAS, the Mount Rose Bowl Property Owners’ Water Company Project is one of those projects which indicated a readiness to proceed and to which a loan can and should be offered; and

WHEREAS, the Division has determined that the Mount Rose Bowl Property Owners' Water Company has the technical, managerial, and financial capability to manage a loan for funding the Project; and

WHEREAS, the Division has taken all necessary and proper actions with respect to the Application as required pursuant to the regulations adopted by the State Environmental Commission (NAC 445A.6751 to 445A.67644, inclusive) pertaining to loan applications; and

WHEREAS, the Board must give prior approval before the Division may commit any money in the account for the revolving fund for expenditure for the purposes set forth in NRS 445A.275;

NOW, THEREFORE, BE IT RESOLVED, BY THE BOARD FOR FINANCING WATER PROJECTS OF THE STATE OF NEVADA:

Section 1. This Resolution shall be known as the "6-2017 Mount Rose Bowl Property Owners' Water Company Project Loan Commitment."

Section 2. The terms and conditions for providing a loan to the Applicant shall be negotiated by the Mount Rose Bowl Property Owners' Water Company and the Division. These terms will include 100% Principal Forgiveness.

Section 3. Based on the review of the Application by the Division and based on the recommendation submitted by the Division to the Board concerning the Project, and subject to the provisions of Section 2 of this Resolution, the Board hereby approves a commitment of funds in an amount not to exceed \$73,000 from the account for the revolving fund in accordance with NRS 445A.265.

Section 4. The Board further recommends that the Division take all other necessary and appropriate actions to effectuate the provisions of this Resolution in accordance with NRS 445A.200 to 445A.295, inclusive, and the Regulations adopted pursuant thereto.

Section 5. This resolution shall be effective on its passage and approval.

PASSED, ADOPTED AND SIGNED JUNE 14, 2017

Chairman
Board for Financing Water Projects

Attest:

Advisor
Board for Financing Water Projects

**Baker General Improvement District
Revised Loan Commitment**

**Board for Financing Water Projects Summary
Drinking Water State Revolving Fund
June 2017**

Project Change of Scope: Meter Replacement & Upgrades

Previous SRF Loan Amount: \$641,375

Additional SRF Loan Amount: \$48,000

GENERAL

The 1996 Amendments to the Safe Drinking Water Act (SDWA) authorized the Drinking Water State Revolving Fund (DWSRF). The DWSRF is a national program to assist public water systems in financing the cost of drinking water infrastructure projects needed to achieve or maintain compliance with the SDWA requirements and to further the public health objectives of the SDWA. The SDWA authorizes the US Environmental Protection Agency (EPA) to award capitalization grants to states that have established DWSRF programs. The Nevada Legislature passed legislation that authorizes the Nevada Division of Environmental Protection (Division) to administer the DWSRF under the Nevada Revised Statutes (NRS) 445A.200 to 445A.295 inclusive. In addition to the authorizing statute, Nevada has adopted Nevada Administrative Code (NAC) 445A.6751 to 445A.67644, which describes the program requirements. Federal regulations for implementation of the DWSRF are found in 40 CFR Part 35. In addition to state and federal regulations, the conditions of the grant award, the Operating Agreement with the EPA, and an assortment of policy directives and guidance from the EPA govern the DWSRF program.

One of the requirements of the NRS pertaining to the DWSRF is that the Division shall not “commit any money in the account for the revolving fund for expenditure...without obtaining the prior approval of the board for financing water projects” (NRS 445A.265, subsection 3).

BACKGROUND

Baker is an unincorporated community in White Pine County. It is located approximately 62 miles east of Ely and 5 miles east of the main entrance of Great Basin National Park.

In July 2015, the Board for Financing Water Projects (Board) approved a principal forgiveness loan for \$476,375 to the Baker GID (GID) to fund the construction of a new 265,000-gallon welded steel storage tank to replace the existing, leaking, bolted storage tank. Increases in overall project cost were incurred due to stipulations put on the land easement by the BLM due to resource management issues related to the Greater Sage-Grouse and to higher than expected bids.

In May 2016, the Board approved additional funding of \$165,000 bringing the total commitment in funding for the new tank to \$641,375. The new tank was completed and put into service in October 2016.



Old, leaking bolted-steel water tank





New, welded-steel, storage tank with BLM required perch deterrents & view screening



With the water tank project complete, there is \$85,108 remaining in the original principal forgiveness loan. The project saving resulted from a savings in the construction contract, in the project contingency, and in the additional funding awarded by the Board.

The GID is asking for a change of scope and a small amount of additional funding – \$48,000 – to replace all of the existing water meters with lead free meters. There are 92 meters in Baker, 86 are residential meters and 6 are commercial meters and most are over 20 years old. The meters in Baker do not comply with NSF/ANSI 61 for lead content, and the GID is committed to replacing these meters with new, compliant models.

Meter reading is currently a manual process in Baker, and with the meters buried 3.5 – 4 feet deep, it takes time to open the meter cover with a stick and clean the lens before actually being able to read the meter dials. As a part of the project, these new meters will also be an AMR (automatic meter reading) technology that will allow the GID to quickly and accurately read the meters regardless of conditions on the ground (i.e., snow). This technology will download the meter data directly to the billing software further automating the system. Meter replacement projects are viewed as enhancing both water and energy efficiency in a water system.

While the actual meter replacement is straightforward, each meter box will need to be dug up, as they are located 3.5 – 4 feet below ground surface. The GID is estimating the field costs to dig up and replace the meters at \$1,000/meter assembly or \$92,000. Their estimate for the new meters and radio-read equipment and software is \$41,000. This brings the total equipment and construction estimate for the project to \$133,000.

Rates established by the GID average \$20.50 per user, per month for 15,000 gallons used. This is below the, ordinarily required, 1.5% of the MHI for the area ($\$24,656 * 1.5\% / 12 = \30.82) but the Census Bureau survey has a large variance. The community is made up of mostly people on fixed incomes, and the GID is meeting operating needs and providing for capital replacement reserves with the current rate. The GID is actively working with Nevada Rural Water Association to review and set rates that will assure the sustainability of the water system by funding emergency reserves, short-lived assets, maintenance (including regular tank inspections and cleanings), and reasonable capital replacement reserve. A new rate schedule is anticipated to be implemented in July 2017.

RECOMMENDATION

NDEP recommends that Board for Financing Water Projects approve a resolution changing the scope of use of the remaining funding, committing additional funds in the amount of \$48,000, and modifying the loan commitment from the DWSRF to \$689,375 to the Baker General Improvement District. Since the project is eligible for additional subsidy as specified in Nevada's Intended Use Plan and as determined by the Division, 100% of the principal will be forgiven. The Division and the Baker General Improvement District will negotiate the terms and conditions of a loan agreement.

The following motion is suggested:

I make a motion that the Board for Financing Water Projects approve a resolution designated the “06-2017 Baker General Improvement District Water System Project Loan Commitment” for an additional loan commitment for the purpose of financing certain projects in an amount not to exceed \$48,000 bringing the total loan commitment to \$689,375 and changing the scope of the project to include meter replacement throughout the system. Since the project is eligible for additional subsidy as specified in Nevada’s Intended Use Plan, 100% of the principal will be forgiven.

RESOLUTION

A RESOLUTION DESIGNATED THE "6-2017 BAKER GENERAL IMPROVEMENT DISTRICT WATER SYSTEM PROJECT LOAN COMMITMENT RESOLUTION" TO APPROVE A LOAN COMMITMENT FOR THE PURPOSE OF FINANCING CERTAIN PROJECTS.

WHEREAS, the Board for Financing Water Projects (the “Board”) of the State of Nevada (the “State”) is authorized by Nevada Revised Statutes (“NRS”) Chapter 445A.265 to approve the Division of Environmental Protection (“Division”) prioritized lists of water projects and to approve the commitment of funds from the account for the revolving fund for loans to community water systems and non-transient water systems for costs of capital improvements required and made necessary pursuant to NRS 445A.800 to 445A.955, inclusive, by the Safe Drinking Water Act (42 U.S.C. §§ 300f *et seq.*) and by the regulations adopted pursuant thereto; and

WHEREAS, the Division has the responsibility of administering the Drinking Water State Revolving Fund program; and

WHEREAS, on June 14, 2017, the Board, pursuant to NRS 445A.265, approved the Year 2018 Priority List of water projects eligible for loans from the account for the revolving fund under the Drinking Water State Revolving Fund; and

WHEREAS, the Baker General Improvement District owns and operates the public water system; and

WHEREAS, the Baker General Improvement District submitted a pre-application to the Division for funding a project to make improvements to the water system, which is hereinafter referred to as the “Project”; and

WHEREAS, the Division ranked the Project as #72 on the Year 2018 Priority List of water projects, which was approved by the Board on June 14, 2017; and

WHEREAS, the Baker General Improvement District submitted to the Division a Letter of Intent to proceed with the Project; and

WHEREAS, the Baker General Improvement District project is ready to proceed; and

WHEREAS, in connection with seeking a loan, the Applicant has submitted a written application (“Application”) pursuant to NAC 445A.67613 to the Division; and

WHEREAS, the Division has reviewed the Letter of Intent and the Application including supporting material thereof, and has determined that the Baker General Improvement District has the technical, managerial and financial capability to manage a loan for the Project; and

WHEREAS, the Baker General Improvement District is eligible to receive additional subsidy as spelled out in Nevada’s Intended Use Plan; and

WHEREAS, the Division has taken all necessary and proper actions with respect to the Application as required pursuant to the regulations adopted by the State Environmental Commission (NAC 445A.6751 to 445A.67644, inclusive) pertaining to loan applications; and

WHEREAS, on July 14, 2015, in the “7-2015 Baker General Improvement District Project Loan Commitment Resolution,” the Board approved a commitment of funds in the amount not to exceed \$476,375 from the account for the revolving fund in accordance with NRS 445A.265; and

WHEREAS, on May 4, 2016 in the “5-2016 Baker General Improvement District Project Loan Commitment Resolution,” the Board approved an additional commitment of funds in the amount not to exceed \$165,000 from the account for the revolving fund in accordance with NRS 445A.265; and

WHEREAS, the Board must give prior approval before the Division may commit any money in the account for the revolving fund for expenditure for the purposes set forth in NRS 445A.275;

NOW, THEREFORE, BE IT RESOLVED, BY THE BOARD FOR FINANCING WATER PROJECTS OF THE STATE OF NEVADA:

Section 1. This Resolution shall be known as the “6-2017 Baker General Improvement District Water System Project Loan Commitment Resolution.”

Section 2. The terms and conditions for providing a loan to the Applicant shall be negotiated by the Baker General Improvement District with the Division. These terms will include 100% Principal Forgiveness for the additional funds approved for this project.

Section 3. Based on the review of the Application by the Division and based on the recommendation submitted by the Division to the Board concerning the Project, and subject to the provisions of Section 2 of this Resolution, the Board hereby approves a change of project scope and a commitment of additional funds in an amount not to exceed \$48,000 from the account for the revolving fund in accordance with NRS 445A.265, bringing the total loan commitment to \$689,375.

Section 4. The Board further recommends that the Division take all other necessary and appropriate actions to effectuate the provisions of this Resolution in accordance with NRS 445A.200 to 445A.295, inclusive, and the Regulations adopted pursuant thereto.

Section 5. This resolution shall be effective on its passage and approval.

PASSED, ADOPTED AND SIGNED JUNE 14, 2016

Chairman
Board for Financing Water Projects

Attest:

Advisor
Board for Financing Water Projects

**Gerlach GID Water System
Loan Commitment**

**Board for Financing Water Projects Summary
Drinking Water State Revolving Fund
June 2017**

Project: Raw Water (Redwood) Tank Replacement

Total Estimated Project Cost: \$374,775

DWSRF Loan Amount: \$374,775

BACKGROUND

The 1996 Amendments to the Safe Drinking Water Act (SDWA) authorized the Drinking Water State Revolving Fund (DWSRF). The DWSRF is a national program to assist public water systems in financing the cost of drinking water infrastructure projects needed to achieve or maintain compliance with the SDWA requirements and to further the public health objectives of the SDWA. The SDWA authorizes the US Environmental Protection Agency (EPA) to award capitalization grants to states that have established DWSRF programs. The Nevada Legislature passed legislation that authorizes the Nevada Division of Environmental Protection (Division) to administer the DWSRF under the Nevada Revised Statutes (NRS) 445A.200 to 445A.295, inclusive. In addition to the authorizing statute, Nevada has adopted Nevada Administrative Code (NAC) 445A.6751 to 445A.67644, which describes the program requirements. Federal regulations for implementation of the DWSRF are found in 40 CFR Part 35. In addition to state and federal regulations, the conditions of the grant award, the Operating Agreement with the EPA, and an assortment of policy directives and guidance from the EPA govern the DWSRF program.

One of the requirements of the NRS pertaining to the DWSRF is that the Division shall not “commit any money in the account for the revolving fund for expenditure...without obtaining the prior approval of the board for financing water projects” (NRS 445A.265, subsection 3).

Existing System

The community of Gerlach is located approximately 108 miles north of Reno. Gerlach receives its water from two springs located in the Granite Range to the north – Rose Spring and Railroad Spring. Flow from the springs totals approximately 250 gallons per minute. Water initially enters the 150,000-gallon redwood tank (raw water) and then flows through an ion exchange treatment system to remove uranium prior to entering the 300,000-gallon welded-steel, finish water tank. With the exception of the pumps at the treatment plant, flow from the springs and within the distribution system is by gravity. Water leaving the ion exchange treatment system is chlorinated.

The redwood tank is listed as a significant deficiency in the most recent – August 27, 2015 – sanitary survey conducted by the Washoe County Health District (WCHD). According to the WCHD, this pre-treatment tank is leaking profusely and has created a continuous water issue in the area. The ground surface is completely saturated and may be adversely affecting the foundation of this tank and the welded-steel finished water storage tank. This tank must be either repaired or replaced immediately to ensure the water system is adequately protected.

This tank was originally purchased from Crescent City, CA and moved to Gerlach in 1977. In 2012, the Gerlach GID (GID) replaced the flat metal roof, but has made no other significant improvements to the tank.

Customers, Population and Growth

According to information provided in the loan application, there are 146 metered connections (117 residential and 29 commercial). The population is approximately 120. Closure of the gypsum mine and plant in 2011 in Empire had a negative effect on growth in Gerlach. Future growth in Gerlach is not, currently, anticipated.

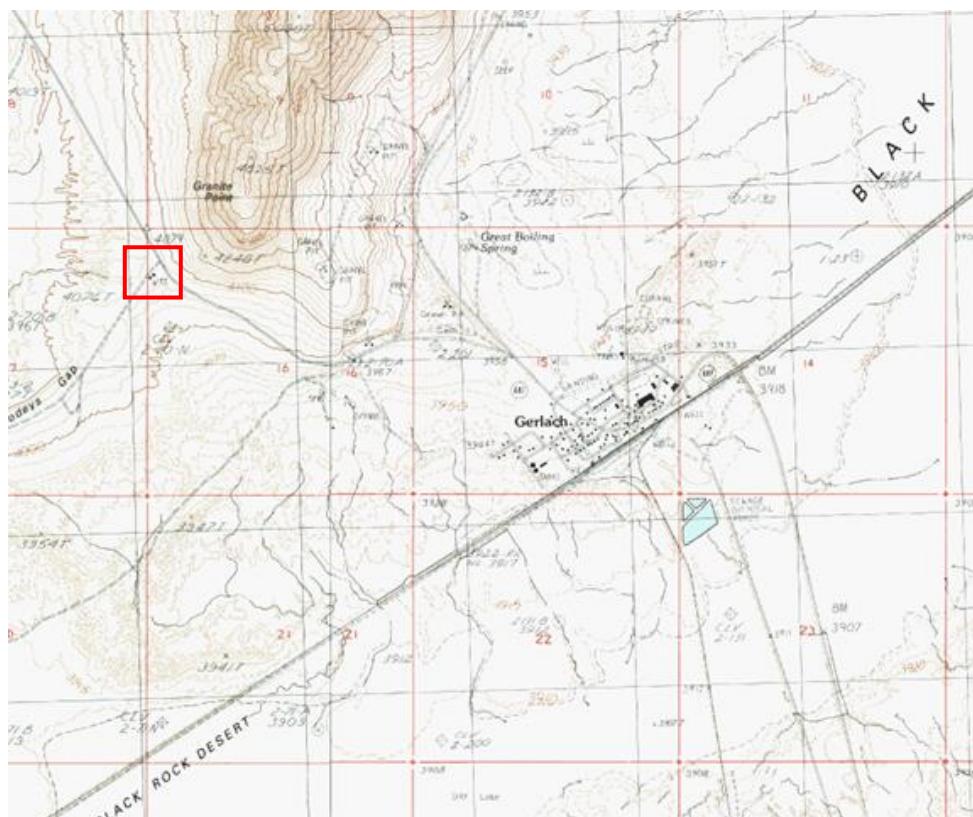
PROPOSED PROJECT

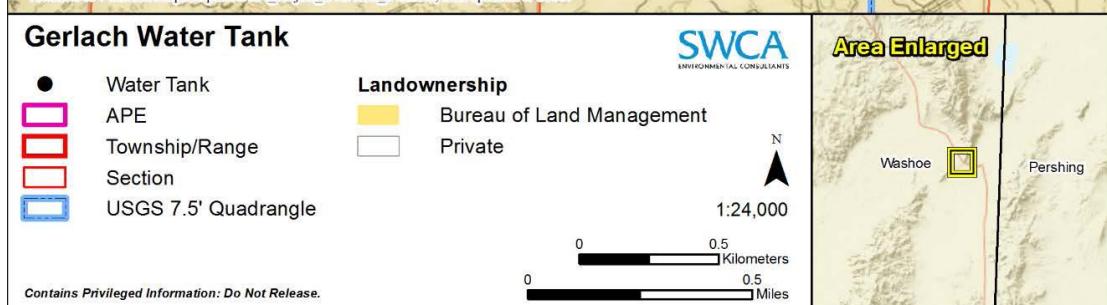
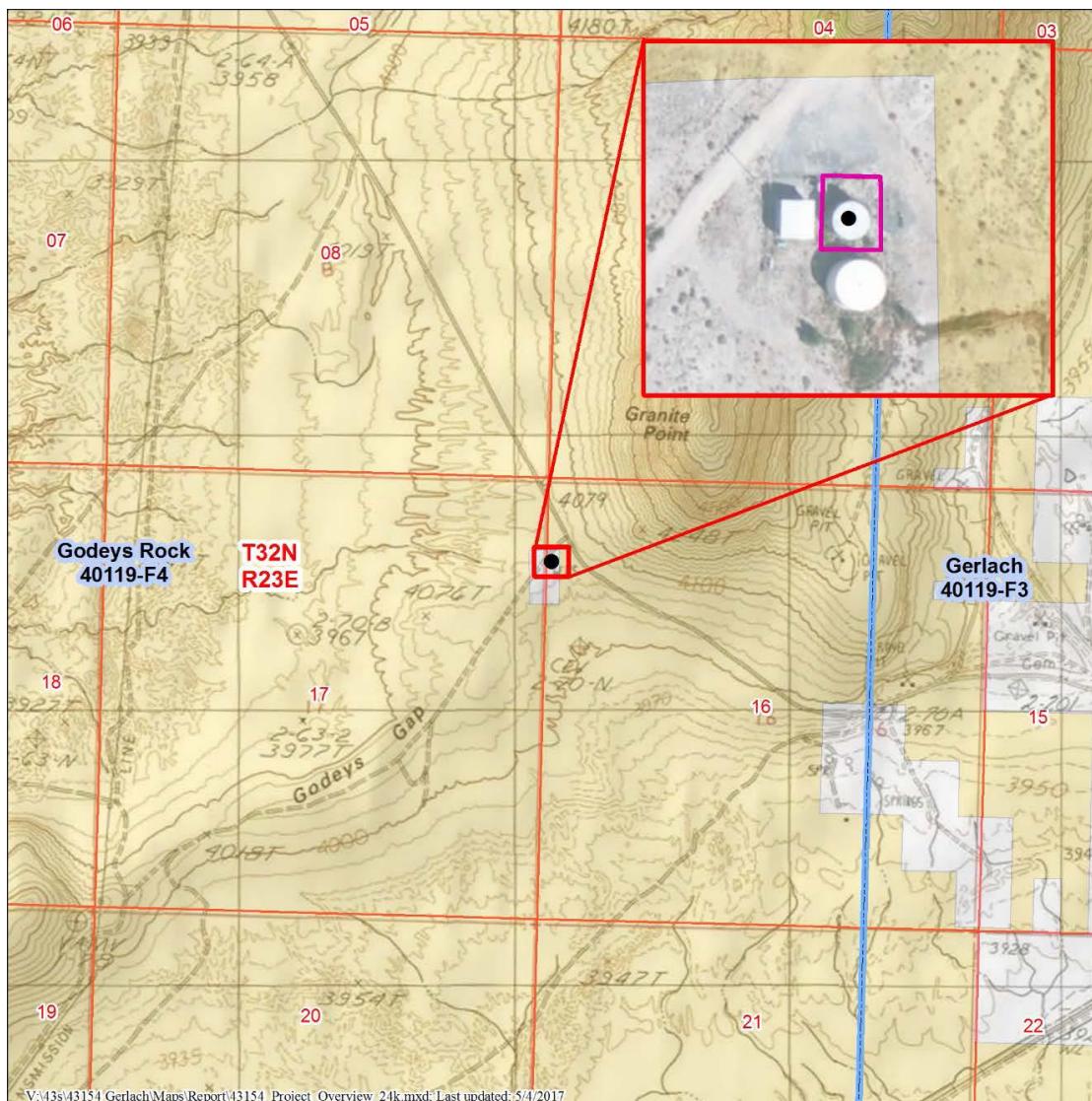
General Description

A 105,000-gallon welded-steel tank will replace the existing 150,000-gallon redwood tank. This new tank will continue to function as the raw water tank, collecting water via gravity flow from the springs and transmitting it to the uranium treatment plant.

Alternatives to Proposed Project

No action. No action will result in continued leaking at the tank site, and the tank would remain a significant deficiency and out of regulatory compliance.







Raw water (redwood) tank



Water pooled at base of redwood tank (Photo by Victor Villagran, SWCA)



Raw water (redwood) and finished water (welded steel) tanks on uranium treatment site (Photo by Victor Villagran, SWCA)

Cost Estimate

Total project cost estimate is \$374,775. The GID intends to provide in-kind labor for the administrative tasks including loan draws and certified payrolls and employee interviews required for compliance with the Davis-Bacon federal prevailing wages.

Budget Item	DWSRF Funding	Local Funding	Totals by Use
Planning (e.g., historic property evaluation/survey/geotech)	\$15,000		\$15,000
Administrative		GGID	
Engineering Design & Construction Inspection/Administration	\$39,975		\$39,975
Construction/Improvements	\$266,500		\$266,500
Construction Contingency	\$53,300		\$53,300
Totals by Source	\$374,775		\$374,775

Item	Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization/Demobilization	LS	1	\$50,000	\$50,000
2	Temporary Storage and Piping Connections	LS	1	\$35,000	\$35,000
3	Demo Exist. Redwood Water Storage Tank	LS	1	\$10,000	\$10,000
4	Site Grading and Tank Foundation	LS	1	\$5,000	\$5,000
5	105,000-Gallon Water Storage Tank	GAL	105,000	\$1.00	\$105,000
6	Tank Interior Coating	LS	1	\$35,000	\$35,000
7	Tank Exterior Coating	LS	1	\$20,000	\$20,000
8	Tank Disinfection	LS	1	\$5,000	\$5,000
9	Telemetry Relocate	LS	1	\$1,500	\$1,500
Construction Cost Sub-Total					\$266,500
Construction Contingency (20%)					\$53,300
Construction Total					\$319,800
Project Planning					\$15,000
Engineering Design and Construction Admin (15%)					\$39,975
TOTAL ESTIMATED PROJECT COST					\$374,775

Project Schedule

Planning & Design	July 2017
Project Bidding	August 2017
Construction	October 2017
Project Completion	December 2017

Environmental Review

Environmental review of water projects is conducted by NDEP pursuant to NAC 445A.6758 to 445A.67612. NDEP determined that the project is eligible for a categorical exclusion under NAC 445A.67583 (2) (b), replacement of equipment or structures, and may be exempted from further substantive environmental review requirements. The project is also eligible for a categorical exclusion under NAC 445A.67583 (2) (e) because there is sufficient evidence that a significant effect on the quality of the environment is unlikely. The proposed improvements will be constructed on property owned by the GID that has been previously disturbed. Best management practices will be utilized during construction. Consultation with appropriate cross-cutting federal, state, and local agencies is in process and will be completed prior to signing a DWSRF loan contract.

Public Participation

The GID reviewed the project for possible funding at a publicly noticed meeting of the GID Board in April 2017. At that meeting, the GID Board approved a motion to pursue funding from the DWSRF.

Permits/Reviews

The Washoe County Health Department will review and approve any plans and bid specification for replacement of the tank.

Financial Evaluation

Since 2010, grant awards from EPA have required that the State of Nevada agree to use 20-30% of its grant to provide additional subsidization to eligible recipients in the form of forgiveness of principal or negative interest loans or any combination of these. Nevada specified in the Intended Use Plan that additional subsidy will be offered to communities that meet the definition of disadvantaged community up to \$500,000. The NAC defines a disadvantaged community as an area served by a public water system in which the median income per household is less than 80 percent of the median household income (MHI) of the state. According to the US Census Bureau, American Community (2011–2015) 80 percent of Nevada's MHI is \$41,478. According to the same survey, the MHI for Gerlach is \$27,788; therefore, Gerlach meets the requirements for additional subsidy, making a principal forgiveness loan appropriate.

Nevada's Intended Use Plan included a requirement that a disadvantaged community receiving additional subsidy in the form of principal forgiveness would be required to charge a reasonable rate for water service to assure the sustainability of the water system. The GID currently charges a base user rate of \$39.20 per month. This base rate includes the use of 10,000 gallons of water. The commodity rate above the first 10,000 gallons is \$0.80/1,000 gallons. A current customer would pay a total of \$43.20 for a monthly usage of 15,000 gallons of water. Based on available MHI information from the Census Bureau, a 'reasonable' monthly water rate for using 15,000 gallons is ($\$27,788 * 1.5\% / 12$) \$34.74; therefore, the GID's current rates meet the DWSRF's requirements.

The GID received grant funding from the State Capital Improvements Grant Program (aka AB198 Grant) in 2001. The grant initially funded the installation of water meters and pilot testing for uranium removal treatment. In 2005, the grant amount was increased to cover a portion of the cost of the new treatment system. The total grant amount committed to the GID was \$840,910.82 – 80.4% of the estimated project costs. Conditions of the grant required that the GID implement a metered water rate and charge a reasonable rate for water. In addition, the GID was required to fund a restricted capital replacement account. As noted above, the GID is charging a reasonable rate for water. The GID is also funding a restricted capital replacement account as required in the conditions of the state grant. The balance of the reserve account as of June 30, 2016 was \$306,876.

In February 2014, the GID received principal forgiveness loan funding from the DWSRF for \$434,640 to replaced 25-year-old, cast iron service saddles within the water system that had experienced significant corrosion and were leaking excessively. Funding was also approved for a short section of pipe that provided looping of the water system. The GID provided in-kind administrative services that covered the Davis-Bacon federal prevailing wage certified payrolls and employee interviews, loan draws, and project updates for the looping of the water system. \$44,677.94 remained at the end of the project and was returned to the DWSRF to provide funding for other projects.

Technical, Managerial and Financial Capacity

The Gerlach water system is in compliance with requirements of the Safe Drinking Water Act, and all monitoring requirements have been met. The Gerlach water system employs a certified operator who has the technical knowledge and ability to operate both the treatment and distribution systems. In addition, the GID has both managerial and financial capacity.

DIVISION RECOMMENDATION

The Division recommends that the Board for Financing Water Projects approve a loan commitment from the DWSRF in an amount not to exceed \$374,775 to the Gerlach General Improvement District. Since the project is eligible for additional subsidy as specified in Nevada's Intended Use Plan, 100% of the principal will be forgiven. The Division and the Gerlach Improvement District will negotiate the terms and conditions of a loan agreement. A resolution is included in your binders with this staff report.

The following motion is suggested: I make a motion that the Board for Financing Water Projects approve a resolution designated the "06-2017 Gerlach General Improvement District Water System Project Loan Commitment" for a loan commitment for the purpose of financing certain projects in an amount not to exceed \$374,775. Since the project is eligible for additional subsidy as specified in Nevada's Intended Use Plan, 100% of the principal will be forgiven.

RESOLUTION

A RESOLUTION DESIGNATED THE "6-2017 GERLACH GENERAL IMPROVEMENT DISTRICT WATER SYSTEM PROJECT LOAN COMMITMENT RESOLUTION" TO APPROVE A LOAN COMMITMENT FOR THE PURPOSE OF FINANCING CERTAIN PROJECTS.

WHEREAS, the Board for Financing Water Projects (the “Board”) of the State of Nevada (the “State”) is authorized by Nevada Revised Statutes (“NRS”) Chapter 445A.265 to approve the Division of Environmental Protection (“Division”) prioritized lists of water projects and to approve the commitment of funds from the account for the revolving fund for loans to community water systems and non-transient water systems for costs of capital improvements required and made necessary pursuant to NRS 445A.800 to 445A.955, inclusive, by the Safe Drinking Water Act (42 U.S.C. §§ 300f *et seq.*) and by the regulations adopted pursuant thereto; and

WHEREAS, the Division has the responsibility of administering the Drinking Water State Revolving Fund program; and

WHEREAS, on June 14, 2017, the Board, pursuant to NRS 445A.265, approved the Year 2018 Priority List of water projects eligible for loans from the account for the revolving fund under the Drinking Water State Revolving Fund; and

WHEREAS, the Gerlach General Improvement District owns and operates the public water system; and

WHEREAS, the Gerlach General Improvement District submitted a pre-application to the Division for funding a project to make improvements to the water system, which is hereinafter referred to as the “Project”; and

WHEREAS, the Division ranked the Project as #49 on the Year 2018 Priority List of water projects, which was approved by the Board on June 14, 2017; and

WHEREAS, the Gerlach General Improvement District submitted to the Division a Letter of Intent to proceed with the Project; and

WHEREAS, the Gerlach General Improvement District project is ready to proceed; and

WHEREAS, in connection with seeking a loan, the Applicant has submitted a written application (“Application”) pursuant to NAC 445A.67613 to the Division; and

WHEREAS, the Division has reviewed the Letter of Intent and the Application including supporting material thereof, and has determined that the Gerlach General Improvement District has the technical, managerial and financial capability to manage a loan for the Project; and

WHEREAS, the Gerlach General Improvement District meets the definition of a disadvantaged community and is eligible to receive additional subsidy as spelled out in Nevada’s Intended Use Plan; and

WHEREAS, the Division has taken all necessary and proper actions with respect to the Application as required pursuant to the regulations adopted by the State Environmental Commission (NAC 445A.6751 to 445A.67644, inclusive) pertaining to loan applications; and

WHEREAS, the Board must give prior approval before the Division may commit any money in the account for the revolving fund for expenditure for the purposes set forth in NRS 445A.275;

NOW, THEREFORE, BE IT RESOLVED, BY THE BOARD FOR FINANCING WATER PROJECTS OF THE STATE OF NEVADA:

Section 1. This Resolution shall be known as the “6-2017 Gerlach General Improvement District Water System Project Loan Commitment Resolution.”

Section 2. The terms and conditions for providing a loan to the Applicant shall be negotiated between the Gerlach General Improvement District and the Division. These terms will include 100% Principal Forgiveness.

Section 3. Based on the review of the Application by the Division and based on the recommendation submitted by the Division to the Board concerning the Project, and subject to the

provisions of Section 2 and 4 of this Resolution, the Board hereby approves a commitment of funds in the amount not to exceed \$374,775 from the account for the revolving fund in accordance with NRS 445A.265.

Section 4. The Board further recommends that the Division take all other necessary and appropriate actions to effectuate the provisions of this Resolution in accordance with NRS 445A.200 to 445A.295, inclusive, and the Regulations adopted pursuant thereto.

Section 5. This resolution shall be effective on its passage and approval.

PASSED, ADOPTED AND SIGNED JUNE 14, 2017

Chairman
Board for Financing Water Projects

Attest:

Advisor
Board for Financing Water Projects

Silver Springs Mutual Water Company
Loan Commitment

Board for Financing Water Projects
Drinking Water State Revolving Fund
June 2017

Project: Replacement of Deodar Well
Total Estimated Project Cost: \$ 622,570
DWSRF Loan Amount: \$ 500,000

GENERAL

The 1996 Amendments to the Safe Drinking Water Act (SDWA) authorized the Drinking Water State Revolving Fund (DWSRF). The DWSRF is a national program to assist public water systems in financing the cost of drinking water infrastructure projects needed to achieve or maintain compliance with the SDWA requirements and to further the public health objectives of the SDWA. The SDWA authorizes the US Environmental Protection Agency (EPA) to award capitalization grants to states that have established DWSRF programs. The Nevada Legislature passed legislation that authorizes the Nevada Division of Environmental Protection (Division) to administer the DWSRF under the Nevada Revised Statutes (NRS) 445A.200 to 445A.295 inclusive. In addition to the authorizing statute, Nevada has adopted Nevada Administrative Code (NAC) 445A.6751 to 445A.67644, which describes the program requirements. Federal regulations for implementation of the DWSRF are found in 40 CFR Part 35. In addition to state and federal regulations, the conditions of the grant award, the Operating Agreement with the EPA, and an assortment of policy directives and guidance from the EPA govern the DWSRF program.

One of the requirements of the NRS pertaining to the DWSRF is that the Division shall not "commit any money in the account for the revolving fund for expenditure...without obtaining the prior approval of the board for financing water projects" (NRS 445A.265, subsection 3).

BACKGROUND

Silver Springs is located at the intersection of U.S. 50 and U.S. 95A. The Silver Springs Mutual Water Company (SSMWC) is a non-profit cooperative association formed in February 1952.

Customers, Population and Growth

<u>Service</u>	<u>Current</u>	<u>Future (Est*)</u>
Residential	1,194	1,870
Commercial, industrial, & other	104	
Population Served	2,961	4,838

*In 2028 based on 2.5% annual growth rate

Existing System

The water system has three active production wells and 3,000,000 gallons of storage that serve two pressure zones. The wells have arsenic levels that exceed the primary drinking water standards. In September 2010, installation of a centralized, coagulation/filtration, arsenic treatment facility was completed, bringing the system into compliance with the arsenic standard.

A main concern for the SSMWC at this time is the aging and deteriorating production wells. Two of the system wells – Fort Churchill St Well and Spruce Well – are no longer operational because of poor water quality and low production capacity. The remaining three wells have exceeded their expected service life and could fail from corrosion (well videos document holes in the well casing) of the low carbon steel casing and screen. Video analysis determined that the well casing is not competent enough to withstand well rehabilitation including brushing, acidifying, swabbing or bailing.

In addition to the casing and screen issues, the existing Deodar Well historically produced approximately 700 GPM, but has diminished in recent years to approximately 550 GPM due to increasing drawdown and problems related to air entrainment caused by upper screen dewatering.

Table 6 – Domestic Well Summary							
Well Name	Status	Year Drilled	Depth To Water (feet)	Well Depth (feet)	Sanitary Seal (Feet)	Casing Diameter (inches)	Max Pumping Rate (gpm)
Fort Churchill St. Well	Not used	1951	40	290	None	8	125
Lake St. Well	In-use	1979	20	350	51	14	1,100
Idaho St. Well	In-use	1973	36	400	50	12	800
Deodar St. Well	In-use	1954	64	260	Unknown	14	600
Spruce Well	Not used	1971	92	294	50	14	200

The SSMWC recently completed the hydrogeologic study funded by the DWSRF to replace the Deodar Well. That study included: sampling/testing of wellhead discharge from existing wells; down well survey and discrete sampling of the existing Deodar Well; and sonic exploratory drilling and testing (including material logging, discrete-zone pumping tests, and discrete-zone water quality testing). The findings of that study included:

Sampling/testing of wellhead discharge from existing wells

- Water quality data from the area of the Deodar Well did not identify specific geographic areas with arsenic concentrations below the MCL – wells up-gradient of the Deodar Well had greater arsenic concentrations.
- Nitrate concentrations in wells throughout the surrounding area are elevated.

Down well survey and discrete sampling of the existing Deodar Well

- Discrete-depth water quality samples taken during production pumping indicated that temperature, pH, and arsenic did not vary appreciably with arsenic remaining between 9.6 - 10 µg/L for all depths sampled. Total dissolved solids and nitrate decreased with depth. The corrosion potential of groundwater produced from the Deodar Well is high.

Sonic exploratory drilling and testing (including material logging, discrete-zone pumping tests, and discrete-zone water quality testing)

- The exploratory well was drilled to 607 ft. below ground surface (BGS).
- Sonic drilling enabled collection of virtually undisturbed samples. The undisturbed samples and rapid penetration rate disproved the existence of a lava flow as described in the lithologic log for the existing Deodar Well located 50 feet to the east.

- The existing Deodar well log noted clay with small rocks from 225 – 250 ft BGS and was not perforated for water production from 240 – 250 ft BGS. The recent exploratory borehole indicates a very productive interval below 241 ft BGS and testing suggests that the existing Deodar Well could have produced a significantly greater amount of water if the zone between 240 and 250 Ft BGS had been perforated.
- Discrete zone pumping tests provided sufficient information to estimate a production potential for a replacement well at 1,500 GPM at a drawdown of 60 ft.
- Arsenic content increased with depth. The lowest zones drilled in the exploratory boring showed water quality with the highest arsenic concentrations and H₂S odor.



Sonic exploratory drilling



Continuous core sections

PROPOSED PROJECT

A new well will be drilled approximately 50 feet west of the old Deodar Well location with a pitless wellhead. The technical rationale for the proposed well includes:

- Per NAC 445A.6672 the total well production must be sufficient to meet the maximum day demand (976 GPM) with all wells pumping and also meet the average day demand (390 GPM) with the largest well off line. Currently SSMWC's three well system must average approximately 325 GPM per well to meet the maximum day conditions when pumping

together and approximately average 195 GPM per well with one well off line to meet the average day condition. Under a three well scenario, the Deodar Well would therefore need to be designed to achieve a minimum of 325 GPM.

- The Idaho Well, originally constructed in 1973, is also in need of replacement. As a result, consideration was given to a two well system should a catastrophic failure of the Idaho Well occur. Under a two well system, each well must average approximately 488 GPM per well to meet the maximum day conditions and one well pumping alone must average 390 GPM to meet the average day condition. Under a two well scenario, the Deodar Well would therefore need to be designed to achieve approximately 488 GPM. It is recommended that SSMWC continue to maintain and operate the existing three well system and to design the Deodar Well to achieve a minimum flow rate of 500 GPM.
- A 14-inch diameter, high efficiency (lowest drawdown), continuous slot well screen is the optimum size screen recommended for the new Deodar Well and is suitable for flows ranging from 500 to 1,000 GPM.
- The existing Deodar Well has an existing transmission main to the arsenic treatment plant. Treatment to reduce arsenic content will likely be part of the routine operation of any replacement well. Sanitary seals are either not documented or were limited to minimum requirements at the time of installation of the existing production wells. Increased protection from surface contaminants, including nitrates, will be achieved with a new Deodar Well and appropriate sanitary seal.
- The Deodar Well submersible pump and above ground equipment has recently been replaced. Improvements included: replacement of the failing well house structure, installation of a connection vault, replacement of chemical equipment, and improvements to electrical (including a VFD) and SCADA equipment. The existing 700 GPM, 330-foot TDH submersible pump and water level transducer will be relocated and set into the new well. The existing VFD will continue to be utilized as is. A new electrical disconnect switch and junction box will be installed at the new wellhead.

Environmental Review

Environmental review of water projects is conducted by the NDEP pursuant to Nevada Administrative Code (NAC) 445A.6758 to 445A.67612. The Deodar Well site went through an environmental review by the USDA in 2012 as a part of recent system upgrades. The USDA determined that the proposed projects (including a new well at the Deodar site) would not individually or cumulatively have a significant effect on the human environment and was eligible for a finding of no significant impact. The NACs allow NDEP to utilize an environmental review conducted by another agency as long as the review complies with NDEP's environmental requirements.

Possible Permits/Approvals

- Design approval from the Bureau of Safe Drinking Water
- A temporary discharge permit will be required from NDEP for discharging well water during the well development & test pumping (to be obtained by Contractor)
- A building permit may be required (to be obtained by Contractor)

Cost Estimate

Budget Item	DWSRF Funding	Local Funding	Totals by Use
Engineering Design, Hydrogeological & Construction Inspection/Administration	\$45,000		\$45,000
Construction/Improvements	\$455,000	\$70,428	\$525,428
Construction Contingency		\$52,143	\$52,143
Totals by Source	\$500,000	\$122,571	\$622,571

DEODAR WELL REPLACEMENT ESTIMATED PROJECT COST ¹		
Item	360 Ft Deep Well	460 FT Deep Well
Drill & Develop 14 inch SS Cased Well	\$390,000	\$460,000
Site Fencing/Relocate Gate	\$12,625	\$12,625
New Pitless Adapter, Relocate and Set Existing Submersible Pump, New SS Drop Pipe, New Submersible Pump Cable, Relocate Level Sensor.	\$36,600	\$36,600
New Electrical Disconnect/J Box at Wellhead	\$5,000	\$5,000
Buried Conduits (water, electrical, level sensor)	\$4,800	\$4,800
Connection to Existing Components inside of Pumphouse	\$10,000	\$10,000
Well Abandonment	\$15,000	\$15,000
Construction Subtotal	\$474,025	\$544,025
Contractor Mobilization/Demobilization, 10%	\$47,403	\$54,403
Estimated Total Construction	\$521,428	\$598,428
Contingency, 10%	\$52,143	\$59,843
Hydrogeological (Well Design & Drilling Observation)	\$30,000	\$30,000
Water Quality Sampling	\$4,000	\$4,000
Civil/Electrical Engineering (Design, Bidding, Construction Administration)	\$15,000	\$15,000
Total Estimated Project Cost	\$622,570	\$707,270

Project Schedule

Design	June 2017
Bidding/Award	July/August 2017
Agreement/NTP/Construction	September/October/November 2017

Financial Evaluation

Based upon the financial information provided, SSMWC is capable of meeting its short-term and long-term financial needs. The company maintains its accounting records in accordance with generally accepted accounting principles for private entities and conducts its financial activities in a manner that demonstrates sustainability in their program.

In order to receive a DWSRF grant award from the EPA, the State of Nevada must agree to use at least 20% - 30% of its grant to provide additional subsidy to eligible recipients in the form of forgiveness of principal or negative interest loans or a combination of these. Nevada specified in the Intended Use Plan that additional subsidy will be offered to communities that meet the definition of disadvantaged community. The NAC defines a disadvantaged community as an area served by a public water system in which the median household income (MHI) is less than 80 percent of the MHI of the state. Based on the 2011-2015 Community Survey conducted by the US Census Bureau, 80 percent of Nevada's MHI is \$41,478 and SSMWC's MHI is \$33,780. Therefore, SSMWC meets the requirements for additional subsidy, making a principal forgiveness loan appropriate.

The water system is fully metered and charges a reasonable rate for service based on the MHI of the service area. Base water rates have increased by \$5 per month four times since 2011. The current base rate for 2016 to 2017 is \$50 per month for 15,000 gallons used (and an additional commodity charge of \$2 per 1,000 gallons above the first 15,000 gallons). The rate charged by the SSMWC exceeds the 'reasonable' water rate guideline ($MHI \times 1.5\% / 12 = \$33,780 \times 1.5\% / 12 = \42.23) generally expected for systems receiving additional subsidy from the DWSRF program.

Unrestricted cash has remained healthy from 2012 to equal \$351,615 by the end of calendar year 2016. Funds from unrestricted cash will be used for the system's funding portion of the project.

Public Notice and Public Participation Process

On May 18, 2017, the Board of Directors of the Silver Springs Mutual Water Company had a publicly noticed meeting and voted to proceed with a loan application to the DWSRF for this project. The Board also committed match funding in an amount not to exceed \$150,000 to complete the project.

Technical, Managerial and Financial Capacity

The water quality is in compliance with requirements of the Safe Drinking Water Act and all monitoring requirements have been met. The SSMWC employs certified operators who have the technical knowledge and ability to operate the system. The most recent sanitary survey conducted by the Bureau of Safe Drinking Water in December 2014 had no violations or deficiencies. The SSMWC employs a full-time manager and has the ability to conduct its financial administrative affairs in a manner that ensures compliance with all applicable standards.

RECOMMENDATION

The Division recommends that the Board for Financing Water Projects approve a loan commitment from the DWSRF in an amount not to exceed \$500,000 to the Silver Springs Mutual Water Company the drilling and construction of a new production well. Since the project is eligible for additional subsidy as specified in Nevada's Intended Use Plan, 100% of the principal will be forgiven. The Division and Silver Springs Mutual Water Company will negotiate the terms and conditions of a loan agreement.

The following motion is suggested: I make a motion that the Board for Financing Water Projects approve a resolution designated the “06-2017 Silver Springs Mutual Water Company Water System Project Loan Commitment” for a loan commitment for the purpose of financing certain projects in an amount not to exceed \$500,000. Since the project is eligible for additional subsidy as specified in Nevada’s Intended Use Plan, 100% of the principal will be forgiven.

RESOLUTION

A RESOLUTION DESIGNATED THE "06-2017 THE SILVER SPRINGS MUTUAL WATER COMPANY PROJECT LOAN COMMITMENT" TO APPROVE A LOAN COMMITMENT FOR THE PURPOSE OF FINANCING CERTAIN PROJECTS.

WHEREAS, the Board for Financing Water Projects (the “Board”) of the State of Nevada (the “State”) is authorized by Nevada Revised Statutes (“NRS”) Chapter 445A.265 to approve for the Division of Environmental Protection (“Division”) prioritized lists of water projects and to approve the commitment of funds from the account for the revolving fund for loans to community water systems and non-transient water systems for costs of capital improvements required and made necessary pursuant to NRS 445A.800 to 445A.955, inclusive, by the Safe Drinking Water Act (42 U.S.C. §§ 300f *et seq.*) and by the regulations adopted pursuant thereto; and

WHEREAS, the Division has the responsibility of administering the Drinking Water State Revolving Fund program; and

WHEREAS, on June 14, 2017, the Board, pursuant to NRS 445A.265, approved the Year 2018 Priority List of water projects eligible for loans from the account for the revolving fund under the Drinking Water State Revolving Fund; and

WHEREAS, the Silver Springs Mutual Water Company owns and operates a public water system located in Silver Springs, Nevada; and

WHEREAS, the Division ranked the Project as #42 on the Year 2018 Priority List of water projects, which was approved by the Board on June 14, 2017; and

WHEREAS, the Silver Springs Mutual Water Company’s Project is one of those projects which indicated a readiness to proceed and to which a loan can and should be offered; and

WHEREAS, the Division has determined that the Silver Springs Mutual Water Company has the technical, managerial and financial capability to manage a loan for funding a portion of the Project; and

WHEREAS, the Division has taken all necessary and proper actions with respect to the Application as required pursuant to the regulations adopted by the State Environmental Commission (NAC 445A.6751 to 445A.67644, inclusive) pertaining to loan applications; and

WHEREAS, the Board must give prior approval before the Division may commit any money in the account for the revolving fund for expenditure for the purposes set forth in NRS 445A.275;

**NOW, THEREFORE, BE IT RESOLVED, BY THE BOARD FOR FINANCING
WATER PROJECTS OF THE STATE OF NEVADA:**

Section 1. This Resolution shall be known as the “06-2017 the Silver Springs Mutual Water Company Project Loan Commitment.”

Section 2. The terms and conditions for providing a loan to the Applicant shall be negotiated by the Silver Springs Mutual Water Company and the Division. These terms will include 100% Principal Forgiveness.

Section 3. Based on the review of the Application by the Division and based on the recommendation submitted by the Division to the Board concerning the Project, and subject to the provisions of Section 2 of this Resolution, the Board hereby approves a commitment of funds in the amount not to exceed \$500,000 from the account for the revolving fund in accordance with NRS 445A.265.

Section 4. The Board further recommends that the Division take all other necessary and appropriate actions to effectuate the provisions of this Resolution in accordance with NRS 445A.200 to 445A.295, inclusive, and the Regulations adopted pursuant thereto.

Section 5. This resolution shall be effective on its passage and approval.

PASSED, ADOPTED AND SIGNED JUNE 14, 2017

Chairman
Board for Financing Water Projects

Attest:

Advisor
Board for Financing Water Projects